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 600
 cgcttcaaag atctcaacct tgctggaaca gcggaggtgg ggcttgacag ctacttcag
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 737

<210> 3310

<211> 210

<212> PRT

<213> Homo sapiens

<400> 3310

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			20					25					30		
Ala	Gln	Leu	Glu	Glu	Gln	Phe	Tyr	Leu	Gln	Ala	Leu	Lys	Leu	Pro	Asn
			35					40				45			
Gln	Thr	His	Pro	Asp	Val	Pro	Val	Gly	Asp	Glu	Ser	Gln	Ala	Arg	Val
	50					55				60					
Leu	His	Met	Val	Gly	Asp	Lys	Pro	Val	Phe	Ser	Phe	Gln	Pro	Arg	Gly
65					70					75				80	
His	Leu	Glu	Ile	Gly	Glu	Lys	Leu	Asp	Ile	Ile	Arg	Gln	Lys	Arg	Leu
				85					90					95	
Ser	His	Val	Ser	Gly	His	Arg	Ser	Tyr	Tyr	Leu	Arg	Gly	Ala	Gly	Ala
			100					105					110		
Leu	Leu	Gln	His	Gly	Leu	Val	Asn	Phe	Thr	Phe	Asn	Lys	Leu	Leu	Arg
		115					120					125			
Arg	Gly	Phe	Thr	Pro	Met	Thr	Val	Pro	Asp	Leu	Leu	Arg	Gly	Ala	Val
	130					135				140					
Phe	Glu	Gly	Cys	Gly	Met	Thr	Pro	Asn	Ala	Asn	Pro	Ser	Gln	Ile	Tyr
145					150					155				160	
Asn	Ile	Asp	Pro	Ala	Arg	Phe	Lys	Asp	Leu	Asn	Leu	Ala	Gly	Thr	Ala
				165					170					175	
Glu	Val	Gly	Leu	Ala	Gly	Tyr	Phe	Met	Asp	His	Thr	Val	Ala	Phe	Arg
			180					185					190		
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Thr	Asn														
	210														

<210> 3311

<211> 486

<212> DNA

<213> Homo sapiens

<400> 3311

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120
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300
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<210> 3312

<211> 102

<212> PRT

<213> Homo sapiens

<400> 3312

Met	Ser	Ser	Cys	Ser	Asn	Val	Cys	Gly	Ser	Arg	Gln	Ala	Gln	Ala	Ala
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Ala	Glu	Gly	Gly	Tyr	Gln	Arg	Tyr	Gly	Val	Arg	Ser	Tyr	Leu	His	Gln
			20					25					30		
Phe	Tyr	Glu	Asp	Cys	Thr	Ala	Ser	Ile	Trp	Glu	Tyr	Glu	Asp	Asp	Phe
		35					40					45			
Gln	Ile	Gln	Arg	Ser	Pro	Asn	Arg	Trp	Ser	Ser	Val	Phe	Trp	Lys	Val
	50					55					60				
Gly	Leu	Ile	Ser	Gly	Thr	Val	Phe	Val	Ile	Leu	Gly	Leu	Thr	Val	Leu
65					70					75				80	
Ala	Val	Gly	Phe	Leu	Val	Pro	Pro	Lys	Ile	Glu	Ala	Phe	Gly	Glu	Ala
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Asp	Phe	Val	Val	Val	Asp										
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<210> 3313

<211> 1791

<212> DNA

<213> Homo sapiens

<400> 3313

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120
cccggggcgg gtcgagttgg cggcggcggc ggccgantgc gttctcgtca gccggaaggg
180
ctgcgaagtc atcataaagt ttctgtttca cccgtcgtcc atgttcgagg actctgtgaa
240
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300

atgatgatgc catttaaacg acaggctcta gtggaatttg aaaacataga tagtgccaaa
360
gaatgtgtga catttgctgc agatgaaccc gtgtacattg ctggccaaca ggcttttttc
420
aactattcta caagcaaaag gatcactcgg ccaggaaata ctgatgatcc atcaggaggc
480
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540
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600
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660
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720
cgtctaaatg ttattaggaa tgacaatgac agttgggact aactaaacc atatttggga
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1020
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1080
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1380
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1791

<210> 3314

<211> 537

<212> PRT

<213> Homo sapiens

<400> 3314

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 Ala Arg Thr Ala Val Lys Arg Arg Pro Gly Ala Gly Arg Val Gly Gly
 35 40 45
 Gly Gly Gly Arg Xaa Arg Ser Arg Gln Pro Glu Gly Leu Arg Ser His
 50 55 60
 His Lys Val Ser Val Ser Pro Val Val His Val Arg Gly Leu Cys Glu
 65 70 75 80
 Ser Val Val Glu Ala Asp Leu Val Glu Ala Leu Glu Lys Phe Gly Thr
 85 90 95
 Ile Cys Tyr Val Met Met Met Pro Phe Lys Arg Gln Ala Leu Val Glu
 100 105 110
 Phe Glu Asn Ile Asp Ser Ala Lys Glu Cys Val Thr Phe Ala Ala Asp
 115 120 125
 Glu Pro Val Tyr Ile Ala Gly Gln Gln Ala Phe Phe Asn Tyr Ser Thr
 130 135 140
 Ser Lys Arg Ile Thr Arg Pro Gly Asn Thr Asp Asp Pro Ser Gly Gly
 145 150 155 160
 Asn Lys Val Leu Leu Leu Ser Ile Gln Asn Pro Leu Tyr Pro Ile Thr
 165 170 175
 Val Asp Val Leu Tyr Thr Val Cys Asn Pro Val Gly Lys Val Gln Arg
 180 185 190
 Ile Val Ile Phe Lys Arg Asn Gly Ile Gln Ala Met Val Glu Phe Glu
 195 200 205
 Ser Val Leu Cys Ala Gln Lys Ala Lys Ala Ala Leu Asn Gly Ala Asp
 210 215 220
 Ile Tyr Ala Gly Cys Cys Thr Leu Lys Ile Glu Tyr Ala Arg Pro Thr
 225 230 235 240
 Arg Leu Asn Val Ile Arg Asn Asp Asn Asp Ser Trp Asp Tyr Thr Lys
 245 250 255
 Pro Tyr Leu Gly Arg Arg Asp Arg Gly Lys Gly Arg Gln Arg Gln Ala
 260 265 270
 Ile Leu Gly Glu His Pro Ser Ser Phe Arg His Asp Gly Tyr Gly Ser
 275 280 285
 His Gly Pro Leu Leu Pro Leu Pro Ser Arg Tyr Arg Met Gly Ser Arg
 290 295 300
 Asp Thr Pro Glu Leu Val Ala Tyr Pro Leu Pro Gln Ala Ser Ser Ser
 305 310 315 320
 Tyr Met His Gly Gly Asn Pro Ser Gly Ser Val Val Met Val Ser Gly
 325 330 335
 Leu His Gln Leu Lys Met Asn Cys Ser Arg Val Phe Asn Leu Phe Cys
 340 345 350
 Leu Tyr Gly Asn Ile Glu Lys Val Lys Phe Met Lys Thr Ile Pro Gly
 355 360 365
 Thr Ala Leu Val Glu Met Gly Asp Glu Tyr Ala Val Glu Arg Ala Val
 370 375 380
 Thr His Leu Asn Asn Val Lys Leu Phe Gly Lys Arg Leu Asn Val Cys
 385 390 395 400
 Val Ser Lys Gln His Ser Val Val Pro Ser Gln Ile Phe Glu Leu Glu

405 410 415
 Asp Gly Thr Ser Ser Tyr Lys Asp Phe Ala Met Ser Lys Asn Asn Arg
 420 425 430
 Phe Thr Ser Ala Gly Gln Ala Ser Lys Asn Ile Ile Gln Pro Pro Ser
 435 440 445
 Cys Val Leu His Tyr Tyr Asn Val Pro Leu Cys Val Thr Glu Glu Thr
 450 455 460
 Phe Thr Lys Leu Cys Asn Asp His Glu Val Leu Thr Phe Ile Lys Tyr
 465 470 475 480
 Lys Val Phe Asp Ala Lys Pro Ser Ala Lys Thr Leu Ser Gly Leu Leu
 485 490 495
 Glu Trp Glu Cys Lys Thr Asp Ala Val Glu Ala Leu Thr Ala Leu Asn
 500 505 510
 His Tyr Gln Ile Arg Val Pro Asn Gly Ser Asn Pro Tyr Thr Leu Lys
 515 520 525
 Leu Cys Phe Ser Thr Ser Ser His Leu
 530 535

<210> 3315

<211> 934

<212> DNA

<213> Homo sapiens

<400> 3315

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 120
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 180
 aaaacatccc tgagttcacc accttgccca gaagttgttc tgccagaccc agttgaggag
 240
 accagacacc atgcagaggt cgtgaagaag gtgaatgaga tgatcgtcac ggggcagtat
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 420
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 480
 cttgttcgag tagaagccac agtcattgaa aagacagaat catggccaag aatcattatg
 540
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 660
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 720
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 780
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 840
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 900

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934

<210> 3316

<211> 187

<212> PRT

<213> Homo sapiens

<400> 3316

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Ser	Ile	His	Arg	Ala	Leu	His	Ile	Tyr	Gln	Gly	Asn	Ile	Lys	Ile	Tyr
			20					25					30		
Val	Pro	Lys	Thr	Ser	Leu	Ser	Ser	Pro	Pro	Trp	Pro	Glu	Val	Val	Leu
		35					40					45			
Pro	Asp	Pro	Val	Glu	Glu	Thr	Arg	His	His	Ala	Glu	Val	Val	Lys	Lys
	50					55					60				
Val	Asn	Glu	Met	Ile	Val	Thr	Gly	Gln	Tyr	Gly	Arg	Leu	Phe	Ala	Val
65					70					75				80	
Val	His	Phe	Ala	Ser	Arg	Gln	Trp	Lys	Val	Thr	Ser	Glu	Asp	Leu	Ile
			85					90					95		
Leu	Ile	Gly	Asn	Glu	Leu	Asp	Leu	Ala	Cys	Gly	Glu	Arg	Ile	Arg	Leu
			100					105					110		
Glu	Lys	Val	Leu	Leu	Val	Gly	Ala	Asp	Asn	Phe	Thr	Leu	Leu	Gly	Lys
		115				120						125			
Pro	Leu	Leu	Gly	Lys	Asp	Leu	Val	Arg	Val	Glu	Ala	Thr	Val	Ile	Glu
	130					135					140				
Lys	Thr	Glu	Ser	Trp	Pro	Arg	Ile	Ile	Met	Arg	Phe	Arg	Lys	Arg	Lys
145					150					155				160	
Asn	Phe	Lys	Lys	Lys	Arg	Ile	Val	Thr	Thr	Pro	Gln	Thr	Val	Leu	Arg
			165					170						175	
Ile	Asn	Ser	Ile	Glu	Ile	Ala	Pro	Cys	Leu	Leu					
			180					185							

<210> 3317

<211> 1665

<212> DNA

<213> Homo sapiens

<400> 3317

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120
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180
caagtgtac gttatgaagc tgccaaatta agaacactga gcaaatgtaa ttctcccgtg
240
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300
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360
ctgggggaga tggaggcgaa gacaagagag ctcattgcta gaagaaccac acctcttttg
420

gaatatatta aaaatagaaa attagaaaag cagagaattc gagaagagaa gcgagaagaa
 480
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 660
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 720
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 780
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<210> 3318

<211> 253

<212> PRT

<213> Homo sapiens

<400> 3318

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			20					25					30		
Glu	Lys	Arg	Glu	Glu	Arg	Arg	Arg	Glu	Leu	Glu	Lys	Lys	Arg	Leu	

35	40	45
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50	55	60
Lys Glu Thr Asp Lys Gln Lys Lys Ile Ala Glu Lys Glu Val Arg Ile		
65	70	75
Lys Leu Leu Lys Lys Pro Glu Lys Gly Glu Glu Pro Thr Thr Glu Lys		
85	90	95
Pro Lys Glu Arg Gly Glu Glu Ile Asp Thr Gly Gly Gly Lys Gln Glu		
100	105	110
Ser Cys Ala Pro Gly Ala Val Val Lys Ala Arg Pro Met Glu Gly Ser		
115	120	125
Leu Glu Glu Pro Gln Glu Thr Ser His Ser Gly Ser Asp Lys Glu His		
130	135	140
Arg Asp Val Glu Arg Ser Gln Glu Gln Glu Ser Glu Ala Gln Arg Tyr		
145	150	155
His Val Asp Asp Gly Arg Arg His Arg Ala His His Glu Pro Glu Arg		
165	170	175
Leu Ser Arg Arg Ser Glu Asp Glu Gln Arg Trp Gly Lys Gly Pro Gly		
180	185	190
Gln Asp Arg Gly Lys Lys Gly Ser Gln Asp Ser Gly Ala Pro Gly Glu		
195	200	205
Ala Met Glu Arg Leu Gly Arg Ala Gln Arg Cys Asp Asp Ser Pro Ala		
210	215	220
Pro Arg Lys Glu Arg Leu Ala Asn Lys Val Phe Ile Lys Pro Lys Lys		
225	230	235
Lys Asn Val Ser Gly Cys Leu Lys Val Gln Ala Ala Cys		
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<210> 3319

<211> 1541

<212> DNA

<213> Homo sapiens

<400> 3319

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120
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<210> 3320

<211> 256

<212> PRT

<213> Homo sapiens.

<400> 3320

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Cys	Pro	Ala	Tyr	Ala	Ser	Tyr	Lys	Ala	Val	Lys	Thr	Lys	Asn	Ile	Arg
		20					25					30			
Glu	Tyr	Val	Arg	Trp	Met	Met	Tyr	Trp	Ile	Val	Phe	Ala	Leu	Phe	Met
		35					40					45			
Ala	Ala	Glu	Ile	Val	Thr	Asp	Ile	Phe	Ile	Ser	Trp	Phe	Pro	Phe	Tyr
		50				55				60					
Tyr	Glu	Ile	Lys	Met	Ala	Phe	Val	Leu	Trp	Leu	Leu	Ser	Pro	Tyr	Thr
		65			70				75					80	
Lys	Gly	Ala	Ser	Leu	Leu	Tyr	Arg	Lys	Phe	Val	His	Pro	Ser	Leu	Ser
			85				90						95		
Arg	His	Glu	Lys	Glu	Ile	Asp	Ala	Tyr	Ile	Val	Gln	Ala	Lys	Glu	Arg
			100				105					110			
Ser	Tyr	Glu	Thr	Val	Leu	Ser	Phe	Gly	Lys	Arg	Gly	Leu	Asn	Ile	Ala

115	120	125
Ala Ser Ala Ala Val Gln Ala Ala Thr Lys Ser Gln Gly Ala Leu Ala		
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Gly Arg Leu Arg Ser Phe Ser Met Gln Asp Leu Arg Ser Ile Ser Asp		
145	150	155
Ala Pro Ala Pro Ala Tyr His Asp Pro Leu Tyr Leu Glu Asp Gln Val		
165	170	175
Ser His Arg Arg Pro Pro Ile Gly Tyr Arg Ala Gly Gly Leu Gln Asp		
180	185	190
Ser Asp Thr Glu Asp Glu Cys Trp Ser Asp Thr Glu Ala Val Pro Arg		
195	200	205
Ala Pro Ala Arg Pro Arg Glu Lys Pro Leu Ile Arg Ser Gln Ser Leu		
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<210> 3321

<211> 1536

<212> DNA

<213> Homo sapiens

<400> 3321

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<210> 3322

<211> 454

<212> PRT

<213> Homo sapiens

<400> 3322

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Leu	Arg	Leu	Tyr	Pro	Pro	Asp	Asn	Ala	Pro	Leu	Ala	Phe	Ser	Ser	Lys
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Val	Cys	Tyr	Val	Lys	Phe	Arg	Asp	Pro	Ser	Ser	Val	Gly	Val	Ala	Gln
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Cys	Ala	Glu	Gly	Lys	Ile	Pro	Glu	Ser	Lys	Ala	Leu	Ser	Leu	Leu	
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Ala	Pro	Ala	Pro	Thr	Met	Thr	Ser	Leu	Met	Pro	Gly	Ala	Gly	Leu	Leu
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225	230	235
Val Lys Pro Pro Glu Met Thr Pro	Gln Ala Ala Lys Glu Leu Glu	
245	250	255
Glu Val Met Lys Arg Val Arg	Glu Ala Gln Ser Phe Ile Ser Ala Ala	
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Ile Glu Pro Glu Ser Gly Lys Ser	Asn Glu Arg Lys Gly Gly Arg Ser	
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Arg Val Lys Glu Lys Asp Arg Glu	Lys Glu Arg Glu Lys Glu	
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Arg Glu Lys Asp Arg Glu Lys Asp	Lys Glu Lys Asp Arg Glu Arg Glu	
405	410	415
Arg Glu Lys Glu His Glu Lys Asp	Arg Asp Lys Glu Lys Glu Lys Glu	
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<211> 949

<212> DNA

<213> Homo sapiens

<400> 3323

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120

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240

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300

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360

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<211> 122

<212> PRT

<213> Homo sapiens

<400> 3324

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			20					25					30		
Thr	Thr	Val	Ile	Pro	Arg	Val	Tyr	Thr	Tyr	Tyr	Val	Ser	Thr	Val	Leu
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Pro	Asp	Glu	Gly	Gln	Glu	Leu	Glu	Glu	Val	Gln	Ala	Glu	Leu	Lys	
65				70				75					80		
Lys	Lys	Asp	Glu	Glu	Val	Ser	His	Gly	Thr	Val	Asp	Leu	Asp	Gln	Lys
			85					90					95		
Gly	Thr	Gln	Leu	Gly	Ile	Asn	Thr	Leu	Gln	Arg	Phe	Leu	Ser	Gly	Pro
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<212> DNA

<213> Homo sapiens

<400> 3325

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<212> PRT
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<400> 3326
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His Gln Gln Gln Met Ala Pro Ser Thr Leu Ser Gln Gln Asn Arg Pro
50 55 60
Thr Gln Asn Pro Pro Ala Gly Leu Met Ser Met Pro Asn Ala Leu Thr
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Thr Gln Gln Gln Gln Gln Gln Lys Leu Arg Leu Gln Arg Ile Gln Met
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Glu Arg Glu Arg Ile Arg Met Arg Gln Glu Glu Leu Met Arg Gln Glu
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165 170 175
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180 185 190
Thr Gly Glu Asn Ala Gly Gln Thr Pro Met Asn Ile Asn Pro Gln Gln
195 200 205
Thr Arg Phe Pro Asp Phe Leu Asp Cys Leu Pro Gly Thr Asn Val Asp
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<400> 3327
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 2160
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 2263

<210> 3328

<211> 521

<212> PRT

<213> Homo sapiens

<400> 3328

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			20					25					30		
His	Trp	Ser	Asp	Ser	Arg	Tyr	Glu	His	Val	Met	Lys	Leu	Arg	Gln	Ala
		35					40					45			
Ala	Leu	Lys	Ser	Ala	Arg	Asp	Met	Trp	Ala	Asp	Tyr	Ile	Leu	Phe	Val
	50				55					60					
Asp	Ala	Asp	Asn	Leu	Ile	Leu	Asn	Pro	Asp	Thr	Leu	Ser	Leu	Leu	Ile
65				70					75					80	
Ala	Glu	Asn	Lys	Thr	Val	Val	Ala	Pro	Met	Leu	Asp	Ser	Arg	Ala	Ala
			85					90						95	
Tyr	Ser	Asn	Phe	Trp	Cys	Gly	Met	Thr	Ser	Gln	Gly	Tyr	Tyr	Lys	Arg
			100					105						110	
Thr	Pro	Ala	Tyr	Ile	Pro	Ile	Arg	Lys	Arg	Asp	Arg	Arg	Gly	Cys	Phe
		115					120						125		
Ala	Val	Pro	Met	Val	His	Ser	Thr	Phe	Leu	Ile	Asp	Leu	Arg	Lys	Ala
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Ala	Ser	Arg	Asn	Leu	Ala	Phe	Tyr	Pro	Pro	His	Pro	Asp	Tyr	Thr	Trp
145				150						155				160	
Ser	Phe	Asp	Asp	Ile	Val	Phe	Ala	Phe	Ser	Cys	Lys	Gln	Ala	Glu	
			165					170					175		
Val	Gln	Met	Tyr	Val	Cys	Asn	Lys	Glu	Glu	Tyr	Gly	Phe	Leu	Pro	Val
			180					185					190		
Pro	Leu	Arg	Ala	His	Ser	Thr	Leu	Gln	Asp	Glu	Ala	Glu	Ser	Phe	Met
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His	Val	Gln	Leu	Glu	Val	Met	Val	Lys	His	Pro	Pro	Ala	Glu	Pro	Ser
	210					215						220			
Arg	Phe	Ile	Ser	Ala	Pro	Thr	Lys	Thr	Pro	Asp	Lys	Met	Gly	Phe	Asp
225				230						235				240	
Glu	Val	Phe	Met	Ile	Asn	Leu	Arg	Arg	Arg	Gln	Asp	Arg	Arg	Glu	Arg
			245					250						255	
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260	265	270
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275	280	285
Ile Gln Met Leu Pro Gly Tyr Arg Asp Pro Tyr His Gly Arg Pro Leu		
290	295	300
Thr Lys Gly Glu Leu Gly Cys Phe Leu Ser His Tyr Asn Ile Trp Lys		
305	310	315
Glu Val Val Asp Arg Gly Leu Gln Lys Ser Leu Val Phe Glu Asp Asp		
325	330	335
Leu Arg Phe Glu Ile Phe Phe Lys Arg Arg Leu Met Asn Leu Met Arg		
340	345	350
Asp Val Glu Arg Glu Gly Leu Asp Trp Asp Leu Ile Tyr Val Gly Arg		
355	360	365
Lys Arg Met Gln Val Glu His Pro Glu Lys Ala Val Pro Arg Val Arg		
370	375	380
Asn Leu Val Glu Ala Asp Tyr Ser Tyr Trp Thr Leu Ala Tyr Val Ile		
385	390	395
Ser Leu Gln Gly Ala Arg Lys Leu Leu Ala Ala Glu Pro Leu Ser Lys		
405	410	415
Met Leu Pro Val Asp Glu Phe Leu Pro Val Met Phe Asp Lys His Pro		
420	425	430
Val Ser Glu Tyr Lys Ala His Phe Ser Leu Arg Asn Leu His Ala Phe		
435	440	445
Ser Val Glu Pro Leu Leu Ile Tyr Pro Thr His Tyr Thr Gly Asp Asp		
450	455	460
Gly Tyr Val Ser Asp Thr Glu Thr Ser Val Val Trp Asn Asn Glu His		
465	470	475
Val Lys Thr Asp Trp Asp Arg Ala Lys Ser Gln Lys Met Arg Glu Gln		
485	490	495
Gln Ala Leu Ser Arg Glu Ala Lys Asn Ser Asp Val Leu Gln Ser Pro		
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Leu Asp Ser Ala Ala Arg Asp Glu Leu		
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<210> 3329

<211> 705

<212> DNA

<213> Homo sapiens

<400> 3329

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 120
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 180
 gctcaagctg ggatgtacca ctgcctggct gagtccccca ctggggctgc tgcctctgct
 240
 ccagtcatgc tccgtgtgct ctacctccc aagacgcca ccatgatggt cttcgtggag
 300
 cctgagggtg gcctccgggg catcctggat tgccgagtgg acagcgagcc gctcgccagc
 360
 ctgactctcc accttggcag tcgactgggt gcctccagtc agccccaggg tgctcctgca
 420

gagccacaca tccatgtcct ggcttcccc aatgccctga gggtagacat cgaggcgctg
 480
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 540
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<210> 3330

<211> 235

<212> PRT

<213> Homo sapiens

<400> 3330

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Ala	Leu	Asn	Leu	Ser	Cys	Arg	Leu	Leu	Gly	Gly	Pro	Gly	Pro	Val	Gly
		20						25					30		
Asn	Ser	Thr	Phe	Ala	Trp	Phe	Trp	Asn	Asp	Arg	Arg	Leu	His	Ala	Glu
		35				40						45			
Pro	Val	Pro	Thr	Leu	Ala	Phe	Thr	His	Val	Ala	Arg	Ala	Gln	Ala	Gly
	50					55					60				
Met	Tyr	His	Cys	Leu	Ala	Glu	Leu	Pro	Thr	Gly	Ala	Ala	Ala	Ser	Ala
65				70						75				80	
Pro	Val	Met	Leu	Arg	Val	Leu	Tyr	Pro	Pro	Lys	Thr	Pro	Thr	Met	Met
				85					90					95	
Val	Phe	Val	Glu	Pro	Glu	Gly	Gly	Leu	Arg	Gly	Ile	Leu	Asp	Cys	Arg
		100						105					110		
Val	Asp	Ser	Glu	Pro	Leu	Ala	Ser	Leu	Thr	Leu	His	Leu	Gly	Ser	Arg
		115					120					125			
Leu	Val	Ala	Ser	Ser	Gln	Pro	Gln	Gly	Ala	Pro	Ala	Glu	Pro	His	Ile
	130					135					140				
His	Val	Leu	Ala	Ser	Pro	Asn	Ala	Leu	Arg	Val	Asp	Ile	Glu	Ala	Leu
145				150						155				160	
Arg	Pro	Ser	Asp	Gln	Gly	Glu	Tyr	Ile	Cys	Ser	Ala	Ser	Asn	Val	Leu
			165						170				175		
Gly	Ser	Ala	Ser	Thr	Ser	Thr	Tyr	Phe	Gly	Val	Arg	Ala	Leu	His	Arg
		180						185					190		
Leu	His	Gln	Phe	Gln	Gln	Leu	Leu	Trp	Val	Leu	Gly	Leu	Leu	Val	Gly
	195					200					205				
Leu	Leu	Leu	Leu	Leu	Leu	Gly	Leu	Gly	Ala	Cys	Tyr	Thr	Trp	Arg	Arg
	210					215					220				
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<210> 3331

<211> 1644

<212> DNA

<213> Homo sapiens

<400> 3331

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120
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180
attttccaag gagaggttgc tatggtgaca gactatgggg cctttatcaa aatcccaggg
240
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300
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360
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420
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480
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540
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600
tacctgatga ggaagaggaa aaggaagagg caaagtcagc agagttagg aagcctgacc
660
ctacaaggaa tccttctaga aaaagaaaga aggagaagaa gaaaaagaaa catagagata
720
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780
acacatcaaa agacagcaag gcagcaaaga agaagaaaa gaagaagaag cacaagaaga
840
agcacaagga gtgagagtat aaagagtgtg gggggtggtt gagagtaaga aaccaggagc
900
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960
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1080
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1644

<210> 3332

<211> 128

<212> PRT

<213> Homo sapiens

<400> 3332

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Thr	Ile	Phe	Gln	Gly	Glu	Val	Ala	Met	Val	Thr	Asp	Tyr	Gly	Ala	Phe
			20					25					30		
Ile	Lys	Ile	Pro	Gly	Cys	Arg	Lys	Gln	Gly	Leu	Val	His	Arg	Thr	His
		35				40						45			
Met	Ser	Ser	Cys	Arg	Val	Asp	Lys	Pro	Ser	Glu	Ile	Val	Asp	Val	Gly
	50					55					60				
Asp	Lys	Val	Trp	Val	Lys	Leu	Ile	Gly	Arg	Glu	Met	Lys	Asn	Asp	Arg
65					70					75				80	
Ile	Lys	Val	Ser	Leu	Ser	Met	Lys	Val	Val	Asn	Gln	Gly	Thr	Gly	Lys
			85					90						95	
Asp	Leu	Asp	Pro	Asn	Asn	Val	Ser	Leu	Ser	Lys	Lys	Arg	Gly	Gly	Gly
			100					105					110		
Asp	Pro	Ser	Arg	Ile	Thr	Leu	Gly	Arg	Arg	Ser	Pro	Leu	Arg	Leu	Ser
			115				120						125		

<210> 3333

<211> 2422

<212> DNA

<213> Homo sapiens

<400> 3333

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300
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360
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600
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660

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720
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1020
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2280

agataaaatg tgtgaaaaca tatttgaaat aaagttcata aatatgcaaa aaaaaaaaaa
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 2400
 aaaaaaaggg aaaaaaaaaa ag
 2422

<210> 3334
 <211> 672
 <212> PRT
 <213> Homo sapiens

<400> 3334

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Ile	Tyr	Glu	Ala	Gly	Ala	Gly	Asp	Arg	Met	Ala	Gly	Ala	Pro	Met
		20					25					30		
Ala	Ala	Val	Gln	Pro	Ala	Glu	Val	Thr	Val	Glu	Val	Gly	Glu	Asp
		35					40					45		
His	Met	His	His	Val	Arg	Asp	Arg	Glu	Met	Pro	Glu	Ala	Leu	Glu
	50					55					60			
Asn	Leu	Ser	Ala	Asn	Pro	Glu	Ser	Ser	Thr	Ile	Phe	Gln	Arg	Asn
65				70						75				80
Gln	Thr	Glu	Ala	Leu	Glu	Phe	Asn	Pro	Ser	Ala	Asn	Pro	Glu	Ala
			85						90				95	
Thr	Ile	Phe	Gln	Arg	Asn	Ser	Gln	Thr	Asp	Val	Val	Glu	Ile	Arg
		100					105					110		
Ser	Asn	Cys	Thr	Asn	His	Val	Ser	Ala	Val	Arg	Phe	Ser	Gln	Gln
	115						120					125		
Ser	Leu	Cys	Ser	Thr	Ile	Phe	Leu	Asp	Asp	Ser	Thr	Ala	Ile	Gln
	130					135					140			
Tyr	Leu	Thr	Met	Thr	Ile	Ile	Ser	Val	Thr	Leu	Glu	Ile	Pro	His
145					150					155				160
Ile	Thr	Gln	Arg	Asp	Ala	Asp	Arg	Thr	Leu	Ser	Ile	Pro	Asp	Glu
		165							170				175	
Leu	His	Ser	Phe	Ala	Val	Ser	Thr	Val	His	Ile	Met	Lys	Lys	Arg
		180						185					190	
Gly	Gly	Gly	Ser	Leu	Asn	Asn	Tyr	Ser	Ser	Ser	Ile	Pro	Ser	Thr
	195						200					205		
Ser	Thr	Ser	Gln	Glu	Asp	Pro	Gln	Phe	Ser	Val	Pro	Pro	Thr	Ala
	210					215					220			
Thr	Pro	Thr	Pro	Val	Cys	Lys	Arg	Ser	Met	Arg	Trp	Ser	Asn	Leu
225				230						235				240
Thr	Ser	Glu	Lys	Gly	Ser	His	Pro	Asp	Lys	Glu	Arg	Lys	Ala	Pro
		245							250				255	
Asn	His	Ala	Asp	Thr	Ile	Gly	Ser	Gly	Arg	Ala	Ile	Pro	Ile	Lys
		260						265					270	
Gly	Met	Leu	Leu	Lys	Arg	Ser	Gly	Lys	Trp	Leu	Lys	Thr	Trp	Lys
	275						280					285		
Lys	Tyr	Val	Thr	Leu	Cys	Ser	Asn	Gly	Met	Leu	Thr	Tyr	Tyr	Ser
	290					295						300		
Leu	Gly	Asp	Tyr	Met	Lys	Asn	Ile	His	Lys	Lys	Glu	Ile	Asp	Leu
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<210> 3335
<211> 477
<212> DNA
<213> Homo sapiens
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 300
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 360
 tgccggggcg ccattctctt gcgggggtgtg cccagtggag ccaggcagtg cgactacacc
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 477

<210> 3336

<211> 59

<212> PRT

<213> Homo sapiens

<400> 3336

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Arg	Cys	Ala	Glu	Cys	Arg	Ala	Pro	Ile	Ser	Leu	Arg	Gly	Val	Pro	Ser
		20						25					30		
Glu	Ala	Arg	Gln	Cys	Asp	Tyr	Thr	Gly	Gln	Tyr	Tyr	Cys	Ser	Pro	Cys
		35					40						45		
His	Trp	Asn	Ala	Leu	Ala	Val	Ile	Pro	Ala	Arg					
		50					55								

<210> 3337

<211> 679

<212> DNA

<213> Homo sapiens

<400> 3337

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 120
 agcttagcct ccaaagacac agatagagtg agagagagag acagagagag acacagagac
 180
 agacagagac caaacagaa gcggcaaacg gcaaaaacga agcagaatca atgcaagtta
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<210> 3338

<211> 102

<212> PRT

<213> Homo sapiens

<400> 3338

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		20					25				30				
Lys	Glu	Val	Arg	Trp	Gly	Ser	Leu	Ser	Leu	Ala	Ser	Lys	Asp	Thr	Asp
	35				40					45					
Arg	Val	Arg	Glu	Arg	Asp	Arg	Glu	Arg	His	Arg	Asp	Arg	Gln	Arg	Pro
	50				55					60					
Lys	Gln	Lys	Arg	Gln	Thr	Ala	Lys	Thr	Lys	Gln	Asn	Gln	Cys	Lys	Leu
65				70					75				80		
Glu	Lys	Lys	Ile	Lys	Leu	Asn	Ile	Arg	Ala	Gly	Lys	Ser	His	Leu	Leu
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Arg	Ile	Thr	Pro	Val	Tyr										
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<210> 3339

<211> 1341

<212> DNA

<213> Homo sapiens

<400> 3339

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 420
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 600
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 780
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<210> 3340

<211> 86

<212> PRT

<213> Homo sapiens

<400> 3340

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Ser	Val	Asn	Ile	Phe	Leu	Tyr	Gln	Asn	Cys	Tyr	Tyr	Ala	Ala	Phe	Ile
		20					25					30			
Trp	Ala	Gly	Phe	Ile	Ile	Leu	His	Cys	Glu	Ile	Ala	Leu	Gln	Cys	Ile
		35					40					45			
Thr	Thr	Ala	Arg	Arg	Thr	Tyr	Ile	Tyr	Ile	Tyr	Ile	Lys	Asn	Ile	Ser
		50				55				60					
Asp	Ser	Cys	Ile	Gln	Met	Ser	Lys	Val	Phe	Val	Ala	Thr	Tyr	Tyr	Ile
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Ala	Tyr	Thr	Gln	Asn	His										
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<210> 3341

<211> 1132

<212> DNA

<213> Homo sapiens

<400> 3341

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ctggagcatg accacagacc cattcagggg ggctggcgga ctcttcatcc tggacagtcc
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 240
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 660
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 720
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 1020
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 1132

<210> 3342

<211> 308

<212> PRT

<213> Homo sapiens

<400> 3342

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 20 25 30
 Gly Pro Phe Ile Leu Gly Pro Arg Leu Gly Asn Ser Pro Val Pro Ser
 35 40 45
 Ile Val Gln Cys Leu Ala Arg Lys Asp Gly Thr Asp Asp Phe Tyr Gln
 50 55 60
 Leu Lys Ile Leu Thr Leu Glu Glu Arg Gly Asp Gln Gly Ile Glu Ser
 65 70 75 80
 Gln Glu Glu Arg Gln Gly Lys Met Leu Leu His Thr Glu Tyr Ser Leu
 85 90 95
 Leu Ser Leu Leu His Thr Gln Asp Gly Val Val His His His Gly Leu

100 105 110
 Phe Gln Asp Arg Thr Cys Glu Ile Val Glu Asp Thr Glu Ser Ser Arg
 115 120 125
 Met Val Lys Lys Met Lys Lys Arg Ile Cys Leu Val Leu Asp Cys Leu
 130 135 140
 Cys Ala His Asp Phe Ser Asp Lys Thr Ala Asp Leu Ile Asn Leu Gln
 145 150 155 160
 His Tyr Val Ile Lys Glu Lys Arg Leu Ser Glu Arg Glu Thr Val Val
 165 170 175
 Ile Phe Tyr Asp Val Val Arg Val Val Glu Ala Leu His Gln Lys Asn
 180 185 190
 Ile Val His Arg Asp Leu Lys Leu Gly Asn Met Val Leu Asn Lys Arg
 195 200 205
 Thr His Arg Ile Thr Ile Thr Asn Phe Cys Leu Gly Lys His Leu Val
 210 215 220
 Ser Glu Gly Asp Leu Leu Lys Asp Gln Arg Gly Ser Pro Ala Tyr Ile
 225 230 235 240
 Ser Pro Asp Val Leu Ser Gly Arg Pro Tyr Arg Gly Lys Pro Ser Asp
 245 250 255
 Met Trp Ala Leu Gly Val Val Leu Phe Thr Met Leu Tyr Gly Gln Phe
 260 265 270
 Pro Phe Tyr Asp Ser Ile Pro Gln Glu Leu Phe Arg Lys Ile Lys Ala
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 Ala Glu Tyr Thr Ile Pro Glu Asp Gly Arg Val Ser Glu Asn Thr Val
 290 295 300
 Cys Leu Ile Arg
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<210> 3343

<211> 594

<212> DNA

<213> Homo sapiens

<400> 3343

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 180
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 480
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<210> 3344

<211> 143

<212> PRT

<213> Homo sapiens

<400> 3344

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      20             25             30
Arg Gln Pro Gly Lys Ser Pro Pro Phe Ser Met Asn Trp Val Val Gly
      35             40             45
Ser Ala Asp Leu Glu Ile Ile Asn Ala Thr Thr Gly Arg Arg Ser Cys
      50             55             60
Gly Gly Pro Ser Arg Leu Cys Lys His Val Leu Ser Ala Arg Trp Ala
      65             70             75             80
Arg Leu Tyr Gly Arg Leu Ser Thr Arg Thr Pro Ser Pro Gly Asp Thr
      85             90             95
Pro Ser Met Tyr Cys Glu Ala Lys Leu Gly Ala His Thr Tyr Gln Ser
      100            105            110
Val Lys Gln Gln Leu Phe Lys Ala Phe Gln Lys Ala Gly Leu Gly Thr
      115            120            125
Trp Val Arg Lys Pro Pro Glu Gln Gln Gln Phe Leu Leu Thr Leu
      130            135            140

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<210> 3345

<211> 1149

<212> DNA

<213> Homo sapiens

<400> 3345

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660

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<210> 3346

<211> 263

<212> PRT

<213> Homo sapiens

<400> 3346

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		20						25				30			
Glu	Glu	Val	Pro	Asp	Val	Thr	Pro	Glu	Glu	Ala	Leu	Pro	Glu	Leu	Pro
		35				40					45				
Pro	Gly	Glu	Pro	Glu	Phe	Arg	Cys	Pro	Glu	Arg	Val	Met	Asp	Leu	Gly
	50					55					60				
Leu	Ser	Glu	Asp	His	Phe	Ser	Arg	Pro	Val	Gly	Leu	Phe	Leu	Ala	Ser
65					70					75				80	
Asp	Val	Gln	Gln	Leu	Arg	Gln	Ala	Ile	Glu	Glu	Cys	Lys	Gln	Val	Ile
			85						90				95		
Leu	Glu	Leu	Pro	Glu	Gln	Ser	Glu	Lys	Gln	Lys	Asp	Ala	Val	Val	Arg
		100						105					110		
Leu	Ile	His	Leu	Arg	Leu	Lys	Leu	Gln	Glu	Leu	Lys	Asp	Pro	Asn	Glu
	115					120						125			
Asp	Glu	Pro	Asn	Ile	Arg	Val	Leu	Leu	Glu	His	Arg	Phe	Tyr	Lys	Glu
	130					135					140				
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			165						170					175	
Cys	His	Ser	Lys	Cys	Leu	Asn	Leu	Ile	Ser	Lys	Pro	Cys	Val	Ser	Ser
		180						185					190		
Lys	Val	Ser	His	Gln	Ala	Glu	Tyr	Glu	Leu	Asn	Ile	Cys	Pro	Glu	Thr
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Gly	Leu	Asp	Ser	Gln	Asp	Tyr	Arg	Cys	Ala	Glu	Cys	Arg	Ala	Pro	Ile
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<400> 3347
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 <210> 3348
 <211> 288
 <212> PRT
 <213> Homo sapiens

<400> 3348
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 Leu Pro Gly Pro Thr Leu Ala Phe Leu Val Leu Ser Thr Pro Ala Met
 50 55 60
 Phe Asp Arg Ala Leu Lys Pro Phe Leu Gln Ser Cys His Leu Arg Met
 65 70 75 80
 Leu Thr Asp Pro Val Asp Gln Cys Val Ala Tyr His Leu Gly Arg Val
 85 90 95
 Gly Glu Ser Leu Pro Glu Leu Gln Ile Glu Ile Ile Ala Asp Tyr Glu
 100 105 110

Val His Pro Asn Arg Arg Pro Lys Ile Leu Ala Gln Thr Ala Ala His
 115 120 125
 Val Ala Gly Ala Ala Tyr Tyr Tyr Gln Arg Gln Asp Val Glu Ala Asp
 130 135 140
 Pro Trp Gly Asn Gln Arg Ile Ser Gly Val Cys Ile His Pro Arg Phe
 145 150 155 160
 Gly Gly Trp Phe Ala Ile Arg Gly Val Val Leu Leu Pro Gly Ile Glu
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 Val Pro Asp Leu Pro Pro Arg Lys Pro His Asp Cys Val Pro Thr Arg
 180 185 190
 Ala Asp Arg Ile Ala Leu Leu Glu Gly Phe Asn Phe His Trp Arg Asp
 195 200 205
 Trp Thr Tyr Arg Asp Ala Val Thr Pro Gln Glu Arg Tyr Ser Glu Glu
 210 215 220
 Gln Lys Ala Tyr Phe Ser Thr Pro Pro Ala Gln Arg Leu Ala Leu Leu
 225 230 235 240
 Gly Leu Ala Gln Pro Ser Glu Lys Pro Ser Ser Pro Ser Pro Asp Leu
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 Arg Ser Trp Leu Ser Pro Arg Val Ser Pro Pro Ala Ser Pro Gly Pro
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<210> 3349

<211> 1132

<212> DNA

<213> Homo sapiens

<400> 3349

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 1132

<210> 3350

<211> 174

<212> PRT

<213> Homo sapiens

<400> 3350

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			20					25					30		
Gln	Gly	Leu	Ala	Val	Tyr	Ala	Ser	Pro	Glu	Asn	Lys	Lys	Leu	Phe	Glu
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Glu	Glu	Lys	Leu	Leu	Arg	Gln	Glu	Gly	Lys	Leu	Glu	Lys	Ile	Gln	Thr
	50					55					60				
Lys	Ala	Gly	Glu	Ala	Thr	Val	Lys	Phe	Leu	Lys	Ser	Cys	Arg	Leu	Glu
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Val	Gly	Met	Lys	Asn	Asn	Val	Lys	Trp	Glu	Leu	Asn	Pro	Glu	Ile	Val
			85					90					95		
Ala	Arg	His	Phe	Phe	Lys	Asn	Leu	Gly	Val	Val	Val	Ala	Pro	His	Thr
			100					105					110		
Leu	Lys	Leu	Pro	Ala	Glu	Pro	Ile	Thr	Arg	Trp	Gly	Glu	Tyr	Trp	Cys
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Glu	Val	Thr	Val	Asn	Gly	Leu	Asp	Thr	Val	Arg	Val	Pro	Met	Ser	Val
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Val	Asn	Phe	Glu	Lys	Pro	Lys	Thr	Lys	Arg	Tyr	Lys	Tyr	Trp	Leu	Ala
145					150				155					160	
Gln	Gln	Ala	Ala	Lys	Ala	Met	Ala	Pro	Thr	Ser	Pro	Gln	Ile		
				165					170						

<210> 3351

<211> 1422

<212> DNA

<213> Homo sapiens

<400> 3351

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 120

atgatgctct tagctccaat aattcatggt ggcaagcaca gtgaacgaca tctgcccctc
 180
 gctgctgcgc cgcgatgcgc tgagcgccgc caaggagggtg ttgtaccacc tggacatcta
 240
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 300
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 360
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 420
 ggactctgtt cggcagatta ttttttcac ctttttcagc cctcaaggga acaaagccga
 480
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 540
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 780
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 960
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 1020
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 1080
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 1140
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 1200
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 1260
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 1320
 ggtgatctcg ggtcccgtgc agcagtcgcc tcacgcgcgc ctccccccgg ggttctaccc
 1380
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 1422

<210> 3352

<211> 97

<212> PRT

<213> Homo sapiens

<400> 3352

Met Trp Pro Ser Gln Leu Leu Ile Phe Met Met Leu Leu Ala Pro Ile
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 Ile His Gly Gly Lys His Ser Glu Arg His Pro Ala Leu Ala Ala Ala

20 25 30
 Pro Arg Cys Ala Glu Arg Arg Gln Gly Gly Val Val Pro Pro Gly His
 35 40 45
 Leu Leu Gln Gln Pro Ala Ala Glu Arg Ala Ala Ala His Arg Gly Gln
 50 55 60
 Gly Pro Arg Gly Ala Ala Gly Gly Val Arg Val Pro Gly Ala Gln Gly
 65 70 75 80
 Ala Gln Arg Ala Ala Gln Glu Thr Glu Phe Pro Ser Gly Ala Ser Thr
 85 90 95
 Ser

<210> 3353

<211> 420

<212> DNA

<213> Homo sapiens

<400> 3353

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 120
 ggctccctac ctgacctcac caacctgcac ttccccccac cactgcccac cccctggac
 180
 cctgaagaga cagcctaccc tagcctgagt gggggcaaca gtacctcaa tttgacctac
 240
 accatgactc acctgggcat cagcaggggc atgggcctgg gccagggcta tgatgcacca
 300
 gggcgcccc ctggatacca gtaaactgtc cactgaccag cggttacccc cataccata
 360
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 420

<210> 3354

<211> 107

<212> PRT

<213> Homo sapiens

<400> 3354

Xaa Lys Leu Ser Ser Ser Ser Arg Pro Arg Ser Cys Glu Val Pro
 1 5 10 15
 Gly Ile Asn Ile Phe Pro Ser Pro Asp Gln Pro Ala Asn Val Pro Val
 20 25 30
 Leu Pro Pro Ala Met Asn Thr Gly Gly Ser Leu Pro Asp Leu Thr Asn
 35 40 45
 Leu His Phe Pro Pro Pro Leu Pro Thr Pro Leu Asp Pro Glu Glu Thr
 50 55 60
 Ala Tyr Pro Ser Leu Ser Gly Gly Asn Ser Thr Ser Asn Leu Thr His
 65 70 75 80
 Thr Met Thr His Leu Gly Ile Ser Arg Gly Met Gly Leu Gly Pro Gly
 85 90 95
 Tyr Asp Ala Pro Gly Arg Pro Pro Gly Tyr Gln
 100 105

<210> 3355
 <211> 474
 <212> DNA
 <213> Homo sapiens

<400> 3355
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 120
 gacaagagtc atgcttttct ccccatcatt ccaaacaccc agagaggtca gctagaagac
 180
 agactgaaca accaggcgcg taccatagct ttccttcttg aacaagcctt ccgcatcaag
 240
 gaggacatct ctgcttgccct gcaggggacc catggctttc gaaaagagga atcgctcgcc
 300
 aggaagttac tggaaagcca catccagacc atcaccagca tcgtcaaaaa actcagccaa
 360
 aatattgaga ttttagaaga ccaaataaga gctcgagatc aggcggccac aggaactaac
 420
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 474

<210> 3356
 <211> 131
 <212> PRT
 <213> Homo sapiens

<400> 3356
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 20 25 30
 Asp Arg Leu Asn Asn Gln Ala Arg Thr Ile Ala Phe Leu Leu Glu Gln
 35 40 45
 Ala Phe Arg Ile Lys Glu Asp Ile Ser Ala Cys Leu Gln Gly Thr His
 50 55 60
 Gly Phe Arg Lys Glu Glu Ser Leu Ala Arg Lys Leu Leu Glu Ser His
 65 70 75 80
 Ile Gln Thr Ile Thr Ser Ile Val Lys Lys Leu Ser Gln Asn Ile Glu
 85 90 95
 Ile Leu Glu Asp Gln Ile Arg Ala Arg Asp Gln Ala Ala Thr Gly Thr
 100 105 110
 Asn Phe Ala Val His Glu Ile Asn Ile Lys His Leu Gln Gly Val Gly
 115 120 125
 Arg Ser Phe
 130

<210> 3357
 <211> 2268
 <212> DNA
 <213> Homo sapiens

<400> 3357

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agcagccatt atggatttgg atgtgctctt tatacccatg tctctaattg cagatggagg
120
agggcctata aaaataattc cttcttgctt acaaagttca gcaaattcca tgttttctga
180
aagaaaaccg catcctggat ggatagcctg tgcagcagag gtcttgcca cttgaatgat
240
tttctccata gataggtagc tctgctggga ggaacgggtt tggcgtgtgg gacgcagctg
300
cctctgtact ggggagtcac ggagtggccg ggctccaggg acatggcggc ggcctctgcg
360
gtgtcgggtg tgcgtggggc ggcggagagg aaccgggtgc atcgtctccc gaggctgtc
420
ctgccgccga ggacatgggt gtggaggcaa agaaccatga agtacacaac agccacagga
480
agaacatta ccaaggctct cattgcaaac agaggagaaa ttgcctgcag ggtgatgcg
540
acagccaaaa aactgggtgt acagactgtg gcggtttata gtgaggctga cagaaattcc
600
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660
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720
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840
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960
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1020
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1080
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1140
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1200
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1260
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1320
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1380
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1440
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1560
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1620

tccgtgcatt atgaccccat gattgcgaag ctggctcgtgt gggcagcaga tcgccaggcg
 1680
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 1740
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 1800
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 1860
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 1920
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 1980
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 2040
 taatcaacca tttccatact catgtaatct aggcatactc tggagttatt acaggtttgg
 2100
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 2160
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 2220
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 2268

<210> 3358

<211> 493

<212> PRT

<213> Homo sapiens

<400> 3358

Gln	Thr	Val	Ala	Val	Tyr	Ser	Glu	Ala	Asp	Arg	Asn	Ser	Met	His	Val
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Asp	Met	Ala	Asp	Glu	Ala	Tyr	Ser	Ile	Gly	Pro	Ala	Pro	Ser	Gln	Gln
		20						25					30		
Ser	Tyr	Leu	Ser	Met	Glu	Lys	Ile	Ile	Gln	Val	Ala	Lys	Thr	Ser	Ala
		35				40						45			
Ala	Gln	Ala	Ile	His	Pro	Gly	Cys	Gly	Phe	Leu	Ser	Glu	Asn	Met	Glu
	50					55				60					
Phe	Ala	Glu	Leu	Cys	Lys	Gln	Glu	Gly	Ile	Ile	Phe	Ile	Gly	Pro	Pro
65				70					75					80	
Pro	Ser	Ala	Ile	Arg	Asp	Met	Gly	Ile	Lys	Ser	Thr	Ser	Lys	Ser	Ile
			85					90					95		
Met	Ala	Ala	Ala	Gly	Val	Pro	Val	Val	Glu	Gly	Tyr	His	Gly	Glu	Asp
		100						105					110		
Gln	Ser	Asp	Gln	Cys	Leu	Lys	Glu	His	Ala	Arg	Arg	Ile	Gly	Tyr	Pro
		115					120					125			
Val	Met	Ile	Lys	Ala	Val	Arg	Gly	Gly	Gly	Gly	Lys	Gly	Met	Arg	Ile
	130					135					140				
Val	Arg	Ser	Glu	Gln	Glu	Phe	Gln	Glu	Gln	Leu	Glu	Ser	Ala	Arg	Arg
145				150					155					160	
Glu	Ala	Lys	Lys	Ser	Phe	Asn	Asp	Asp	Ala	Met	Leu	Ile	Glu	Lys	Phe
			165					170					175		
Val	Asp	Thr	Pro	Arg	His	Val	Glu	Val	Gln	Val	Phe	Gly	Asp	His	His
		180						185					190		
Gly	Asn	Ala	Val	Tyr	Leu	Phe	Glu	Arg	Asp	Cys	Ser	Val	Gln	Arg	Arg

195	200	205
His Gln Lys Ile Ile Glu Glu Ala Pro Ala Pro Gly Ile Lys Ser Glu		
210	215	220
Val Arg Lys Lys Leu Gly Glu Ala Ala Val Arg Ala Ala Lys Ala Val		
225	230	235
Asn Tyr Val Gly Ala Gly Thr Val Glu Phe Ile Met Asp Ser Lys His		
245	250	255
Asn Phe Cys Phe Met Glu Met Asn Thr Arg Leu Gln Val Glu His Pro		
260	265	270
Val Thr Glu Met Ile Thr Gly Thr Asp Leu Val Glu Trp Gln Leu Arg		
275	280	285
Ile Ala Ala Gly Glu Lys Ile Pro Leu Ser Gln Glu Glu Ile Thr Leu		
290	295	300
Gln Gly His Ala Phe Glu Ala Arg Ile Tyr Ala Glu Asp Pro Ser Asn		
305	310	315
Asn Phe Met Pro Val Ala Gly Pro Leu Val His Leu Ser Thr Pro Arg		
325	330	335
Ala Asp Pro Ser Thr Arg Ile Glu Thr Gly Val Arg Gln Gly Asp Glu		
340	345	350
Val Ser Val His Tyr Asp Pro Met Ile Ala Lys Leu Val Val Trp Ala		
355	360	365
Ala Asp Arg Gln Ala Ala Leu Thr Lys Leu Arg Tyr Ser Leu Arg Gln		
370	375	380
Tyr Asn Ile Val Gly Leu His Thr Asn Ile Asp Phe Leu Leu Asn Leu		
385	390	395
Ser Gly His Pro Glu Phe Glu Ala Gly Asn Val His Thr Asp Phe Ile		
405	410	415
Pro Gln His His Lys Gln Leu Leu Leu Ser Arg Lys Ala Ala Ala Lys		
420	425	430
Glu Ser Leu Cys Gln Ala Ala Leu Gly Leu Ile Leu Lys Glu Lys Ala		
435	440	445
Met Thr Asp Thr Phe Thr Leu Gln Ala His Asp Gln Phe Ser Pro Phe		
450	455	460
Ser Ser Ser Ser Gly Arg Arg Leu Asn Ile Ser Tyr Thr Arg Asn Met		
465	470	475
Thr Leu Lys Asp Gly Lys Asn Ser Phe Arg Leu Leu Gly		
485	490	

<210> 3359

<211> 652

<212> DNA

<213> Homo sapiens

<400> 3359

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gcctatacct actgtagctt ctccacgtat ggaccctaaa ggctactgct gctactacgg
120

ggctagacag ttactgtctc agctctagga tgtgcgttct tccactagaa gctcttctga
180

gggaggtaat taaaaaacag tggaatggaa aaacagtgc gtagtcatcc tgtaatatgc
240

tccttgtaa caatgtatac attcctgcta ggtgccatat tcattgcttt aagctcaagt
300

cgcatcttac tagtgaagta ttctgccaat gaagaaaaca agtatgatta tcttccaact
 360
 actgtgaatg tgtgctcaga actggtgaag ctagtcttct gtgtgcttgt gtcattctgt
 420
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 480
 gatttcatga agtgggccat tcttgccctt ctttatttcc tggataacct gattgtcttc
 540
 tatgtcctgt cctatcttca accagccatg gctgttatct tctcaaattt tagcattata
 600
 acaacagctc ttctattcag gatagtgtg aagagggcgc taaactggat cc
 652

<210> 3360

<211> 149

<212> PRT

<213> Homo sapiens

<400> 3360

Met	Glu	Lys	Gln	Cys	Cys	Ser	His	Pro	Val	Ile	Cys	Ser	Leu	Ser	Thr
1				5					10					15	
Met	Tyr	Thr	Phe	Leu	Leu	Gly	Ala	Ile	Phe	Ile	Ala	Leu	Ser	Ser	Ser
			20				25					30			
Arg	Ile	Leu	Leu	Val	Lys	Tyr	Ser	Ala	Asn	Glu	Glu	Asn	Lys	Tyr	Asp
	35					40					45				
Tyr	Leu	Pro	Thr	Thr	Val	Asn	Val	Cys	Ser	Glu	Leu	Val	Lys	Leu	Val
	50					55					60				
Phe	Cys	Val	Leu	Val	Ser	Phe	Cys	Val	Ile	Lys	Lys	Asp	His	Gln	Ser
65					70				75					80	
Arg	Asn	Leu	Lys	Tyr	Ala	Ser	Trp	Lys	Glu	Phe	Ser	Asp	Phe	Met	Lys
			85					90					95		
Trp	Ser	Ile	Pro	Ala	Phe	Leu	Tyr	Phe	Leu	Asp	Asn	Leu	Ile	Val	Phe
			100				105					110			
Tyr	Val	Leu	Ser	Tyr	Leu	Gln	Pro	Ala	Met	Ala	Val	Ile	Phe	Ser	Asn
		115				120					125				
Phe	Ser	Ile	Ile	Thr	Thr	Ala	Leu	Leu	Phe	Arg	Ile	Val	Leu	Lys	Arg
	130					135					140				
Arg	Leu	Asn	Trp	Ile											
145															

<210> 3361

<211> 1040

<212> DNA

<213> Homo sapiens

<400> 3361

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 120
 ggagtcgcct gcgcgcgcag cggaggccag tgcgccggcg catagcgagc ccgggtctgt
 180
 gatcgccgag gcgggagtga agatagtcca agtcctaaga gacagcgcct ctctcattca
 240

gtctttgatt atacatcagc atcaccagct cctcaccac caatgcgacc atgggagatg
 300
 acatcaaata ggcagccccc ttcagttcga ccaagccaac atcacttctc aggggaacga
 360
 tgcaacacac ctgcacgcaa cagaagaagt cctcctgtca ggcgccagag aggaagaagg
 420
 gatcgtctgt ctgcacataa ttccattagt caagatgaaa actatcacca tctcccttac
 480
 gcacagcagc aagcaataga ggagcctcga gccttccacc ctccgaatgt atctccccgt
 540
 ctgctacatc ctgctgtcga tccacccag cagaatgcag tcatgggtga catacatgat
 600
 cagctccatc aaggaacagt cctgttttct tacacagtaa caacagtggc accacatggg
 660
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 720
 tctgtggttt tcatgggaca gcacctccct gtctgtagt tgctcctcc aatgcttcag
 780
 gcatgttcag ttcagcactt accagtacca tatgtgtcat tccacccct tatttctagt
 840
 gatccatttc ttatacatcc tctcacctt tctcccatc atctcctca ttgcccacca
 900
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 1020
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 1040

<210> 3362

<211> 252

<212> PRT

<213> Homo sapiens

<400> 3362

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Pro	Ser	Gln	His	His	Phe	Ser	Gly	Glu	Arg	Cys	Asn	Thr	Pro	Ala	Arg
			20					25					30		
Asn	Arg	Arg	Ser	Pro	Pro	Val	Arg	Arg	Gln	Arg	Gly	Arg	Arg	Asp	Arg
			35				40					45			
Leu	Ser	Arg	His	Asn	Ser	Ile	Ser	Gln	Asp	Glu	Asn	Tyr	His	His	Leu
	50				55					60					
Pro	Tyr	Ala	Gln	Gln	Gln	Ala	Ile	Glu	Glu	Pro	Arg	Ala	Phe	His	Pro
65					70					75					80
Pro	Asn	Val	Ser	Pro	Arg	Leu	Leu	His	Pro	Ala	Ala	His	Pro	Pro	Gln
				85					90					95	
Gln	Asn	Ala	Val	Met	Val	Asp	Ile	His	Asp	Gln	Leu	His	Gln	Gly	Thr
			100					105					110		
Val	Pro	Val	Ser	Tyr	Thr	Val	Thr	Thr	Val	Ala	Pro	His	Gly	Ile	Pro
		115					120					125			
Leu	Cys	Thr	Gly	Gln	His	Ile	Pro	Ala	Cys	Ser	Thr	Gln	Gln	Val	Pro
	130					135					140				
Gly	Cys	Ser	Val	Val	Phe	Ser	Gly	Gln	His	Leu	Pro	Val	Cys	Ser	Val

145		150		155		160									
Pro	Pro	Pro	Met	Leu	Gln	Ala	Cys	Ser	Val	Gln	His	Leu	Pro	Val	Pro
		165						170					175		
Tyr	Ala	Ala	Phe	Pro	Pro	Leu	Ile	Ser	Ser	Asp	Pro	Phe	Leu	Ile	His
		180						185					190		
Pro	Pro	His	Leu	Ser	Pro	His	His	Pro	Pro	His	Leu	Pro	Pro	Pro	Gly
		195					200					205			
Gln	Phe	Val	Pro	Phe	Gln	Thr	Gln	Gln	Ser	Arg	Ser	Pro	Leu	Gln	Arg
	210				215						220				
Ile	Glu	Asn	Glu	Val	Glu	Leu	Leu	Gly	Glu	His	Leu	Pro	Gly	Ala	His
225				230					235				240		
Pro	Gln	His	Pro	His	Leu	Leu	Ile	Asn	Ile	Ser	Thr				
		245					250								

<210> 3363

<211> 718

<212> DNA

<213> Homo sapiens

<400> 3363

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120
gtagctcagg agtgtctccg gagccactg gagaagcccc ccaacggcct cctcttcccc
180
cagcacgggg actatcagta cggcgcgaac aacatctaaa cagaccactt ccaatacagc
240
cggcagagct acccaaactc gtacagtttg aaccgctatg atgtgtagag tccaaaggac
300
aggaccagac tgttggtgac tccttccccg gccccacag cagtatcaga aacttctgac
360
aatcagtga tgtacaacct agccgagggg acggtgcata actctccatc agaagccctg
420
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480
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540
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600
ttccccaagc agtgtagctc agagcacttg tgtctgcatt ccagataaca ttcaggacct
660
gtgtgaaaag ctgggggtcac tgtggctgta gaccatgaac tggcagtggg ggtgtcca
718

<210> 3364

<211> 163

<212> PRT

<213> Homo sapiens

<400> 3364

Met	Gly	His	Trp	Ser	Leu	Phe	Arg	Phe	Ala	Gln	Ser	Ser	Arg	Pro	Ser
1				5						10				15	
Ala	Leu	Gln	Ala	Thr	His	Pro	Pro	Ala	Ala	His	Gly	Gly	Pro	Gly	Thr

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      20      25      30
Pro Gly Leu Leu Met Glu Ser Tyr Ala Pro Ser Pro Arg Leu Gly Cys
      35      40      45
Thr Phe Thr Asp Cys Gln Lys Phe Leu Ile Leu Leu Trp Gly Pro Gly
      50      55      60
Lys Glu Ser Pro Thr Val Trp Ser Cys Pro Leu Asp Ser Thr His His
      65      70      75      80
Ser Gly Ser Asn Cys Thr Ser Leu Gly Ser Ser Ala Gly Cys Ile Gly
      85      90      95
Ser Gly Leu Phe Arg Cys Cys Cys Gly Arg Thr Asp Ser Pro Arg Ala
      100      105      110
Gly Gly Arg Gly Gly Arg Trp Gly Ala Ser Pro Val Gly Ser Gly Asp
      115      120      125
Thr Pro Glu Leu Leu Gly Arg Gln Cys His Pro Lys Asn His Gly His
      130      135      140
Asp Gly Val Pro Asp His Ala Gly Gln Pro Ile Pro His His Gln Arg
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Ser Trp Ala

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<210> 3365

<211> 2389

<212> DNA

<213> Homo sapiens

<400> 3365

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720
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780
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840

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<210> 3366

<211> 624

<212> PRT

<213> Homo sapiens

<400> 3366

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Trp Thr Asn Tyr Ile His Gly Trp Gln Asp Arg Trp Val Val Leu Lys
 35          40          45
Asn Asn Ala Leu Ser Tyr Tyr Lys Ser Glu Asp Glu Thr Glu Tyr Gly
 50          55          60
Cys Arg Gly Ser Ile Cys Leu Ser Lys Ala Val Ile Thr Pro His Asp
 65          70          75          80
Phe Asp Glu Cys Arg Phe Asp Ile Ser Val Asn Asp Ser Val Trp Tyr
 85          90          95
Leu Arg Ala Gln Asp Pro Asp His Arg Gln Gln Trp Ile Asp Ala Ile
 100         105         110
Glu Gln His Lys Thr Glu Ser Gly Tyr Gly Ser Glu Ser Ser Leu Arg
 115         120         125
Arg His Gly Ser Met Val Ser Leu Val Ser Gly Ala Ser Gly Tyr Ser
 130         135         140
Ala Thr Ser Thr Ser Ser Phe Lys Lys Gly His Ser Leu Arg Glu Lys
 145         150         155         160
Leu Ala Glu Met Glu Thr Phe Arg Asp Ile Leu Cys Arg Gln Val Asp
 165         170         175
Thr Leu Gln Lys Tyr Phe Asp Ala Cys Ala Asp Ala Val Ser Lys Asp
 180         185         190
Glu Leu Gln Arg Asp Lys Val Val Glu Asp Asp Glu Asp Asp Phe Pro
 195         200         205
Thr Thr Arg Ser Asp Gly Asp Phe Leu His Ser Thr Asn Gly Asn Lys
 210         215         220
Glu Lys Leu Phe Pro His Val Thr Pro Lys Gly Ile Asn Gly Ile Asp
 225         230         235         240
Phe Lys Gly Glu Ala Ile Thr Phe Lys Ala Thr Thr Ala Gly Ile Leu
 245         250         255
Ala Thr Leu Ser His Cys Ile Glu Leu Met Val Lys Arg Glu Asp Ser
 260         265         270
Trp Gln Lys Arg Leu Asp Lys Glu Thr Glu Lys Lys Arg Arg Thr Glu
 275         280         285
Glu Ala Tyr Lys Asn Ala Met Thr Glu Leu Lys Lys Lys Ser His Phe
 290         295         300
Gly Gly Pro Asp Tyr Glu Glu Gly Pro Asn Ser Leu Ile Asn Glu Glu
 305         310         315         320
Glu Phe Phe Asp Ala Val Glu Ala Ala Leu Asp Arg Gln Asp Lys Ile
 325         330         335
Glu Glu Gln Ser Gln Ser Glu Lys Val Arg Leu His Trp Pro Thr Ser
 340         345         350
Leu Pro Ser Gly Asp Ala Phe Ser Ser Val Gly Thr His Arg Phe Val
 355         360         365
Gln Lys Pro Tyr Ser Arg Ser Ser Ser Met Ser Ser Ile Asp Leu Val
 370         375         380
Ser Ala Ser Asp Asp Val His Arg Phe Ser Ser Gln Val Glu Glu Met

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Asn	Trp	Gln	Leu	Val	Val	Glu	Glu	Gly	Glu	Met	Lys	Val	Tyr	Arg	Arg
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Glu	Val	Glu	Glu	Asn	Gly	Ile	Val	Leu	Asp	Pro	Leu	Lys	Ala	Thr	His
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Ala	Val	Lys	Gly	Val	Thr	Gly	His	Glu	Val	Cys	Asn	Tyr	Phe	Trp	Asn
		450				455					460				
Val	Asp	Val	Arg	Asn	Asp	Trp	Glu	Thr	Thr	Ile	Glu	Asn	Phe	His	Val
465					470					475				480	
Val	Glu	Thr	Leu	Ala	Asp	Asn	Ala	Ile	Ile	Ile	Tyr	Gln	Thr	His	Lys
			485					490						495	
Arg	Val	Trp	Pro	Ala	Ser	Gln	Arg	Asp	Val	Leu	Tyr	Leu	Ser	Val	Ile
		500						505					510		
Arg	Lys	Ile	Pro	Ala	Leu	Thr	Glu	Asn	Asp	Pro	Glu	Thr	Trp	Ile	Val
		515					520					525			
Cys	Asn	Phe	Ser	Val	Asp	His	Asp	Ser	Ala	Pro	Leu	Asn	Asn	Arg	Cys
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Val	Arg	Ala	Lys	Ile	Asn	Val	Ala	Met	Ile	Cys	Gln	Thr	Leu	Val	Ser
545					550					555				560	
Pro	Pro	Glu	Gly	Asn	Gln	Glu	Ile	Ser	Arg	Asp	Asn	Ile	Leu	Cys	Lys
			565					570						575	
Ile	Thr	Tyr	Val	Ala	Asn	Val	Asn	Pro	Gly	Gly	Trp	Ala	Pro	Ala	Ser
			580					585					590		
Val	Leu	Arg	Ala	Val	Ala	Lys	Arg	Glu	Tyr	Pro	Lys	Phe	Leu	Lys	Arg
		595					600					605			
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<210> 3367

<211> 366

<212> DNA

<213> Homo sapiens

<400> 3367

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180agtattttac ggactgaagg aggcgtgccg cctgccctgc cctcctactg gtggaggaag
240gaggtgctgg gagccccaca actcagggcc ccccgacgcc cagtaaggcc actgtacacc
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360

accagg

366

<210> 3368

<211> 104

<212> PRT

<213> Homo sapiens

<400> 3368

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          20             25             30
Lys Asp Val Arg Gly Lys Gly Cys Trp Glu Ser Ile Leu Arg Thr Glu
          35             40             45
Gly Gly Val Pro Pro Ala Leu Pro Ser Tyr Trp Trp Arg Lys Glu Val
          50             55             60
Leu Gly Ala Pro Gln Leu Arg Ala Pro Arg Arg Pro Val Arg Pro Leu
65             70             75             80
Tyr Thr Pro Pro Asp Pro Asp His Asn Gln Pro Pro Ile Val Leu Leu
          85             90             95
Thr Leu Phe Pro Ser Gly Thr Arg
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<210> 3369

<211> 1405

<212> DNA

<213> Homo sapiens

<400> 3369

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aaggttttat ataatgccaa taaaaatgat gattatgaca acgaggagat cttaacctat
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480
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780
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900

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<210> 3370

<211> 269

<212> PRT

<213> Homo sapiens

<400> 3370

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Thr	Ile	Glu	Glu	Asp	Lys	Glu	Gln	Lys	Asn	Gln	Glu	Asn	Cys	Gly	Ala
			20					25					30		
Lys	Lys	Asn	Lys	Lys	Lys	Arg	Lys	Lys	Val	Leu	Tyr	Asn	Ala	Asn	Lys
		35					40					45			
Asn	Asp	Asp	Tyr	Asp	Asn	Glu	Glu	Ile	Leu	Thr	Tyr	Glu	Glu	Met	Ser
	50					55					60				
Leu	Tyr	His	Gln	Pro	Ala	Asn	Arg	Lys	Arg	Pro	Ile	Ile	Leu	Ile	Gly
65					70					75					80
Pro	Gln	Asn	Cys	Gly	Gln	Asn	Glu	Leu	Arg	Gln	Arg	Leu	Met	Asn	Lys
			85					90						95	
Glu	Lys	Asp	Arg	Phe	Ala	Ser	Ala	Val	Pro	His	Thr	Thr	Arg	Ser	Arg
			100					105					110		
Arg	Asp	Gln	Glu	Val	Ala	Gly	Arg	Asp	Tyr	His	Phe	Val	Ser	Arg	Gln
		115					120					125			
Ala	Phe	Glu	Ala	Asp	Ile	Ala	Ala	Gly	Lys	Phe	Ile	Glu	His	Gly	Glu
	130					135					140				
Phe	Glu	Lys	Asn	Leu	Tyr	Gly	Thr	Ser	Ile	Asp	Ser	Val	Arg	Gln	Val
145				150						155					160
Ile	Asn	Ser	Gly	Lys	Ile	Cys	Leu	Leu	Ser	Leu	Arg	Thr	Gln	Ser	Leu
			165					170						175	
Lys	Thr	Leu	Arg	Asn	Ser	Asp	Leu	Lys	Pro	Tyr	Ile	Ile	Phe	Ile	Ala
			180					185					190		
Pro	Pro	Ser	Gln	Glu	Arg	Leu	Arg	Ala	Leu	Leu	Ala	Lys	Glu	Gly	Lys
		195					200					205			
Asn	Pro	Lys	Pro	Glu	Glu	Leu	Arg	Glu	Ile	Ile	Glu	Lys	Thr	Arg	Glu
	210					215					220				
Met	Glu	Gln	Asn	Asn	Gly	His	Tyr	Phe	Asp	Thr	Ala	Ile	Val	Asn	Ser

2551

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Glu Asn Lys Pro Ser Trp Ser Val Pro Ser Pro Asp Trp Arg Ala Trp		
	100	105
Trp Gln Arg Ser Leu Ser Leu Ala Arg Ala Asn Ser Gly Asp Gln Asp		
	115	120
Tyr Lys Tyr Asp Ser Thr Ser Asp Asp Ser Asn Phe Leu Asn Pro Pro		
	130	135
Arg Gly Trp Asp His Thr Ala Pro Gly His Arg Thr Phe Glu Thr Lys		
	145	150
Asp Gln Pro Glu Tyr Asp Ser Thr Asp Gly Glu Gly Asp Trp Ser Leu		
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Trp Ser Val Cys Ser Val Thr Cys Gly Asn Gly Asn Gln Lys Arg Thr		
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Arg Ser Cys Gly Tyr Ala		190
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<210> 3373

<211> 726

<212> DNA

<213> Homo sapiens

<400> 3373

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<211> 84
 <212> PRT
 <213> Homo sapiens

<400> 3374
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 Lys Ser Ser Ala Ser Val Val Phe Thr Thr Tyr Thr Gln Lys His Pro
 35 40 45
 Ser Ile Glu Asp Gly Pro Pro Phe Val Glu Pro Leu Leu Asn Phe Ile
 50 55 60
 Trp Phe Leu Leu Leu Ala Val Asp Gly Cys Val Leu Gly Ser Cys Arg
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 Gly Arg Gly Leu

<210> 3375
 <211> 393
 <212> DNA
 <213> Homo sapiens

<400> 3375
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<210> 3376
 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 3376
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<212> DNA
<213> Homo sapiens
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<210> 3378

<211> 970

<212> PRT

<213> Homo sapiens

<400> 3378

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Ala	Ser	Val	Ile	Gln	Phe	Gly	Lys	Ser	Ala	Lys	Arg	Thr	Pro	Glu	Ser
			20					25					30		
Thr	Gln	Ile	Gly	Gln	Tyr	Gly	Asn	Gly	Leu	Lys	Ser	Gly	Ser	Met	Arg
			35				40					45			
Ile	Gly	Lys	Asp	Phe	Ile	Leu	Phe	Thr	Lys	Lys	Glu	Asp	Thr	Met	Thr
			50				55				60				
Cys	Leu	Phe	Leu	Ser	Arg	Thr	Phe	His	Glu	Glu	Glu	Gly	Ile	Asp	Glu
65					70				75					80	
Val	Ile	Val	Pro	Leu	Pro	Thr	Trp	Asn	Ala	Arg	Thr	Arg	Glu	Pro	Val
			85					90					95		
Thr	Asp	Asn	Val	Glu	Lys	Phe	Ala	Ile	Glu	Thr	Glu	Leu	Ile	Tyr	Lys
			100				105					110			
Tyr	Ser	Pro	Phe	Arg	Thr	Glu	Glu	Glu	Val	Met	Thr	Gln	Phe	Met	Lys
			115				120					125			
Ile	Pro	Gly	Asp	Ser	Gly	Thr	Leu	Val	Ile	Ile	Phe	Asn	Leu	Lys	Leu
			130				135				140				
Met	Asp	Asn	Gly	Glu	Pro	Glu	Leu	Asp	Ile	Ile	Ser	Asn	Pro	Arg	Asp
145					150				155					160	
Ile	Gln	Met	Ala	Glu	Thr	Ser	Pro	Glu	Gly	Thr	Lys	Pro	Glu	Arg	Arg

2558

595	600	605
Pro Glu Ala Pro Arg Lys	Pro Ala Asn Thr Leu Val Lys Thr Ala Ser	
610	615	620
Arg Pro Ala Pro Leu Val Gln Gln Leu Ser Pro Ser Leu Leu Pro Asn		
625	630	635
Ser Lys Ser Pro Arg Glu Val Pro Ser Pro Lys Val Ile Lys Thr Pro		
645	650	655
Val Val Lys Lys Thr Glu Ser Pro Ile Lys Leu Ser Pro Ala Thr Pro		
660	665	670
Ser Arg Lys Arg Ser Val Ala Val Ser Asp Glu Glu Glu Val Glu Glu		
675	680	685
Glu Ala Glu Arg Arg Lys Glu Arg Cys Lys Arg Gly Arg Phe Val Val		
690	695	700
Lys Glu Glu Lys Lys Asp Ser Asn Glu Leu Ser Asp Ser Ala Gly Gly		
705	710	715
Glu Asp Ser Ala Asp Leu Lys Arg Ala Gln Lys Asp Lys Gly Leu His		
725	730	735
Val Glu Val Arg Val Asn Arg Glu Trp Tyr Thr Gly Arg Val Thr Ala		
740	745	750
Val Glu Val Gly Lys His Val Val Arg Trp Lys Val Lys Phe Asp Tyr		
755	760	765
Val Pro Thr Asp Thr Thr Pro Arg Asp Arg Trp Val Glu Lys Gly Ser		
770	775	780
Glu Asp Val Arg Leu Met Lys Pro Pro Ser Pro Glu His Gln Ser Leu		
785	790	795
Asp Thr Gln Gln Glu Gly Gly Glu Glu Glu Val Gly Pro Val Ala Gln		
805	810	815
Gln Ala Ile Ala Val Ala Glu Pro Ser Thr Ser Glu Cys Leu Arg Ile		
820	825	830
Glu Pro Asp Thr Thr Ala Leu Ser Thr Asn His Glu Thr Ile Asp Leu		
835	840	845
Leu Val Gln Ile Leu Arg Asn Cys Leu Arg Tyr Phe Leu Pro Pro Ser		
850	855	860
Phe Pro Ile Ser Lys Lys Gln Leu Ser Ala Met Asn Ser Asp Glu Leu		
865	870	875
Ile Ser Phe Pro Leu Lys Glu Tyr Phe Lys Gln Tyr Glu Val Gly Leu		
885	890	895
Gln Asn Leu Cys Asn Ser Tyr Gln Ser Arg Ala Asp Ser Arg Ala Lys		
900	905	910
Ala Ser Glu Glu Ser Leu Arg Thr Ser Glu Arg Lys Leu Arg Glu Thr		
915	920	925
Glu Glu Lys Leu Gln Lys Leu Arg Thr Asn Ile Val Ala Leu Leu Gln		
930	935	940
Lys Val Gln Glu Asp Ile Asp Ile Asn Thr Asp Asp Glu Leu Asp Ala		
945	950	955
Tyr Ile Glu Asp Leu Ile Thr Lys Gly Asp		
965	970	

<210> 3379

<211> 898

<212> DNA

<213> Homo sapiens

<400> 3379

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 180
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 300
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 420
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 480
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 540
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 660
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 720
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 780
 ggctccactc tgctaaccct ggaggctaca gatgctgatg gaagccgcag ccatgccgct
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 898

<210> 3380

<211> 299

<212> PRT

<213> Homo sapiens

<400> 3380

Xaa	Ile	Trp	Ala	Glu	Thr	Arg	Leu	Val	Leu	Met	Ala	Thr	Asp	Arg	Gly
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Ser	Pro	Ala	Leu	Val	Gly	Ser	Ala	Thr	Leu	Thr	Val	Met	Val	Ile	Asp
			20					25					30		
Thr	Asn	Gly	Asn	Arg	Pro	Thr	Ile	Pro	Gln	Pro	Trp	Glu	Leu	Arg	Val
		35					40					45			
Ser	Glu	Asp	Ala	Leu	Leu	Gly	Ser	Glu	Ile	Ala	Gln	Val	Thr	Gly	Asn
	50					55					60				
Asp	Val	Asp	Ser	Gly	Pro	Val	Leu	Trp	Tyr	Val	Leu	Ser	Pro	Ser	Gly
65					70				75					80	
Pro	Gln	Asp	Pro	Phe	Ser	Val	Gly	Arg	Tyr	Gly	Gly	Arg	Val	Ser	Leu
			85					90					95		
Thr	Gly	Pro	Leu	Asp	Phe	Glu	Gln	Cys	Asp	Arg	Tyr	Gln	Leu	Gln	Leu
		100						105				110			
Leu	Ala	His	Asp	Gly	Pro	His	Glu	Gly	Arg	Ala	Xaa	Leu	Thr	Val	Leu
		115					120					125			
Val	Glu	Asp	Val	Asn	Asp	Asn	Ala	Pro	Ala	Phe	Ser	Gln	Ser	Leu	Tyr

130 135 140
 Gln Val Met Leu Leu Glu His Thr Pro Pro Gly Ser Ala Ile Leu Ser
 145 150 155 160
 Val Ser Ala Thr Asp Arg Asp Ser Gly Ala Asn Gly His Ile Ser Tyr
 165 170 175
 His Leu Ala Ser Pro Ala Asp Gly Phe Ser Val Asp Pro Asn Asn Gly
 180 185 190
 Thr Leu Phe Thr Ile Val Gly Thr Leu Ala Leu Gly His Asp Gly Ser
 195 200 205
 Gly Ala Val Asp Val Val Leu Glu Ala Arg Asp His Gly Ala Pro Val
 210 215 220
 Arg Ala Ala Arg Ala Thr Val Asn Val Gln Leu Arg Asp Gln Asn Asp
 225 230 235 240
 His Ala Pro Ser Phe Thr Leu Phe His Tyr Arg Val Ala Val Thr Glu
 245 250 255
 Asp Leu Pro Pro Gly Ser Thr Leu Leu Thr Leu Glu Ala Thr Asp Ala
 260 265 270
 Asp Gly Ser Arg Ser His Ala Ala Val Asp Tyr Ser Ile Ile Ser Gly
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 Asn Trp Gly Arg Val Phe Gln Leu Glu Pro Arg
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<210> 3381

<211> 1379

<212> DNA

<213> Homo sapiens

<400> 3381

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 120
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 180
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 240
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 300
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 360
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 420
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<210> 3382

<211> 279

<212> PRT

<213> Homo sapiens

<400> 3382

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Ala	Thr	Glu	Gln	Glu	Pro	Leu	Glu	Gly	Thr	Glu	Gln	Thr	Leu	Asp	Ala
			20					25					30		
Glu	Glu	Glu	Gln	Glu	Glu	Ser	Glu	Glu	Ala	Ala	Cys	Gly	Ser	Lys	Lys
			35				40					45			
Arg	Val	Val	Pro	Gly	Ile	Val	Tyr	Leu	Gly	His	Ile	Pro	Pro	Arg	Phe
			50			55					60				
Arg	Pro	Leu	His	Val	Arg	Asn	Leu	Leu	Ser	Ala	Tyr	Gly	Glu	Val	Gly
65				70						75				80	
Arg	Val	Phe	Phe	Gln	Ala	Glu	Asp	Arg	Phe	Val	Arg	Arg	Lys	Lys	Lys
			85					90					95		
Ala	Ala	Ala	Ala	Ala	Gly	Gly	Lys	Lys	Arg	Ser	Tyr	Thr	Lys	Asp	Tyr
			100				105						110		
Thr	Glu	Gly	Trp	Val	Glu	Phe	Arg	Asp	Lys	Arg	Ile	Ala	Lys	Arg	Val
			115				120					125			
Ala	Ala	Ser	Leu	His	Asn	Thr	Pro	Met	Gly	Ala	Arg	Arg	Arg	Ser	Pro
			130			135					140				
Phe	Arg	Tyr	Asp	Leu	Trp	Asn	Leu	Lys	Tyr	Leu	His	Arg	Phe	Thr	Trp
145				150						155				160	
Ser	His	Leu	Ser	Glu	His	Leu	Ala	Phe	Glu	Arg	Gln	Val	Arg	Arg	Gln
			165					170					175		
Arg	Leu	Arg	Ala	Glu	Val	Ala	Gln	Ala	Lys	Arg	Glu	Thr	Asp	Phe	Tyr
			180				185						190		
Leu	Gln	Ser	Val	Glu	Arg	Gly	Gln	Arg	Phe	Leu	Ala	Ala	Asp	Gly	Asp
			195				200						205		
Pro	Ala	Arg	Pro	Asp	Gly	Ser	Trp	Thr	Phe	Ala	Gln	Arg	Pro	Thr	Glu

210 215 220
 Gln Glu Leu Arg Ala Arg Lys Ala Ala Arg Pro Gly Gly Arg Glu Arg
 225 230 235 240
 Ala Arg Leu Ala Thr Ala Gln Asp Lys Ala Arg Ser Asn Lys Gly Leu
 245 250 255
 Leu Ala Arg Ile Phe Gly Ala Pro Pro Ser Glu Ser Met Glu Gly
 260 265 270
 Pro Ser Leu Val Arg Asp Ser
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<210> 3383
 <211> 309
 <212> DNA
 <213> Homo sapiens

<400> 3383
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 120
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 180
 ctgggagctg tcctgcccc gatctccac acaaacactc cagcatgaaa gagcgagact
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 300
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 309

<210> 3384
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 3384
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 Thr Asn Phe Val Ala Gly Val Ser Ile Val Val Ile Cys Val Ile Gly
 20 25 30
 Asn Ala His Phe Leu Thr Ser Phe Val Leu Glu His Arg Ile Thr Ala
 35 40 45
 Asn Ala His Pro Trp Glu Leu Ser Cys Pro Arg Ser Pro Thr Gln Thr
 50 55 60
 Leu Gln His Glu Arg Ala Arg Leu Asn Leu Lys Lys Lys Phe Arg
 65 70 75 80
 Ala Pro Glu Gln Glu Leu Val Ser Ile Ile Asn Ser Glu Ser
 85 90

<210> 3385
 <211> 720
 <212> DNA
 <213> Homo sapiens

<400> 3385

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 120
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<210> 3386

<211> 188

<212> PRT

<213> Homo sapiens

<400> 3386

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Thr	Ser	Ser	Ala	Pro	His	Tyr	Pro	Gly	Ser	Phe	Arg	Val	Gly	Pro	Arg
			20					25					30		
Gln	Pro	Pro	Ala	Ser	Ala	Thr	Thr	Pro	Val	Pro	Leu	Ala	Arg	Phe	Phe
			35				40					45			
Val	Asn	Phe	Pro	Ser	Ala	Lys	Gln	Tyr	Phe	Ser	Gln	Phe	Lys	His	Met
	50					55				60					
Glu	Asp	Pro	Leu	Glu	Met	Glu	Arg	Ser	Pro	Gln	Leu	Arg	Lys	His	Ala
65					70					75				80	
Cys	Arg	Val	Met	Gly	Ala	Leu	Asn	Thr	Val	Val	Glu	Asn	Leu	His	Asp
			85					90					95		
Pro	Asp	Lys	Val	Ser	Ser	Val	Leu	Ala	Leu	Val	Gly	Lys	Ala	His	Ala
			100					105					110		
Leu	Lys	His	Lys	Val	Glu	Pro	Val	Tyr	Phe	Lys	Ile	Leu	Ser	Gly	Val
			115				120					125			
Ile	Leu	Glu	Val	Val	Ala	Glu	Glu	Phe	Ala	Ser	Asp	Phe	Pro	Pro	Glu
			130				135				140				
Thr	Gln	Arg	Ala	Trp	Ala	Lys	Leu	Arg	Gly	Leu	Ile	Tyr	Ser	His	Val
145					150					155				160	
Thr	Ala	Ala	Tyr	Lys	Glu	Val	Gly	Trp	Val	Gln	Gln	Val	Pro	Asn	Ala
			165					170					175		
Thr	Thr	Pro	Pro	Ala	Thr	Leu	Pro	Ser	Ser	Gly	Pro				

180

185

<210> 3387

<211> 3299

<212> DNA

<213> Homo sapiens

<400> 3387

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<210> 3388

<211> 153

<212> PRT

<213> Homo sapiens

<400> 3388

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Leu	Gly	Val	Trp	Thr	Gln	Arg	Arg	Arg	Glu	His	Glu	Arg	Pro	Ser
			20					25					30	Ser
Leu	Arg	Val	Val	Leu	Ala	Leu	Arg	Gly	Arg	Glu	Glu	Val	Ser	Asp
			35					40					45	Ala
Gly	Cys	Gly	Gly	Pro	Arg	Ile	Thr	Ile	Asn	Lys	Asp	Thr	Lys	Val
	50					55					60			Pro
Asn	Ala	Cys	Leu	Phe	Thr	Ile	Asn	Lys	Glu	Asp	His	Thr	Leu	Gly
	65				70					75				80
Ile	Ile	Lys	Ser	Gln	Leu	Leu	Lys	Asp	Pro	Gln	Val	Leu	Phe	Ala
				85					90					95
Tyr	Lys	Val	Pro	His	Pro	Leu	Glu	His	Lys	Ile	Ile	Ile	Arg	Val
			100					105					110	Gln
Thr	Thr	Pro	Asp	Tyr	Ser	Pro	Gln	Glu	Ala	Phe	Thr	Asn	Ala	Ile
	115						120					125		Thr
Asp	Leu	Ile	Ser	Glu	Leu	Ser	Leu	Leu	Glu	Glu	Arg	Phe	Arg	Val
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Ile	Lys	Asp	Lys	Gln	Glu	Gly	Ile	Glu						
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<210> 3389

<211> 308

<212> DNA

<213> Homo sapiens

<400> 3389

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 gacggggaac cttctgacca gcctcatggg ctctctcagag caggaggatg gggaggagag
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cggtcgac
308

<210> 3390
<211> 102
<212> PRT
<213> Homo sapiens

<400> 3390
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Leu Cys Leu Lys Asn Lys Ser Ser Ala Ser Val Val Phe Thr Thr Tyr
20 25 30
Thr Gln Lys His Pro Ser Ile Glu Asp Gly Pro Pro Phe Val Glu Pro
35 40 45
Leu Leu Asn Phe Ile Trp Phe Leu Leu Leu Ala Val Asp Gly Glu Pro
50 55 60
Ser Asp Gln Pro His Gly Leu Leu Arg Ala Gly Trp Gly Gly Glu
65 70 75 80
Pro Gln Arg Arg Gln Pro His Arg Ala Gly Leu Asn Trp Pro Gly His
85 90 95
Val Glu Thr Pro Arg Ser
100

<210> 3391
<211> 1295
<212> DNA
<213> Homo sapiens

<400> 3391
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240
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300
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360
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420
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480
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540
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 780
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 960
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 1020
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 1080
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 1200
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 1295

<210> 3392

<211> 355

<212> PRT

<213> Homo sapiens

<400> 3392

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			20					25					30		
Phe	Gly	Val	Ile	Ala	Asp	Val	Gln	Phe	Ala	Asp	Leu	Glu	Asp	Gly	Phe
		35					40					45			
Asn	Phe	Gln	Gly	Thr	Arg	Arg	Arg	Tyr	Tyr	Arg	His	Ser	Leu	Leu	His
	50				55						60				
Leu	Gln	Gly	Ala	Ile	Glu	Asp	Trp	Asn	Asn	Glu	Ser	Ser	Met	Pro	Cys
65					70					75				80	
Cys	Val	Leu	Gln	Leu	Gly	Asp	Ile	Ile	Asp	Gly	Tyr	Asn	Ala	Gln	Tyr
			85						90					95	
Asn	Ala	Ser	Lys	Lys	Ser	Leu	Glu	Leu	Val	Met	Asp	Met	Phe	Lys	Arg
			100						105				110		
Leu	Lys	Val	Pro	Val	His	His	Thr	Trp	Gly	Asn	His	Glu	Phe	Tyr	Asn
		115					120					125			
Phe	Ser	Arg	Glu	Tyr	Leu	Thr	His	Ser	Lys	Leu	Asn	Thr	Lys	Phe	Leu
	130					135						140			
Glu	Asp	Gln	Ile	Val	His	His	Pro	Glu	Thr	Met	Pro	Ser	Glu	Asp	Tyr
145				150						155				160	
Tyr	Ala	Tyr	His	Phe	Val	Pro	Phe	Pro	Lys	Phe	Arg	Phe	Ile	Leu	Leu
			165						170					175	
Asp	Ala	Tyr	Asp	Leu	Ser	Val	Leu	Gly	Val	Asp	Gln	Ser	Ser	Pro	Lys
			180						185				190		
Tyr	Glu	Gln	Cys	Met	Lys	Ile	Leu	Arg	Glu	His	Asn	Pro	Asn	Thr	Glu
		195					200						205		
Leu	Asn	Ser	Pro	Gln	Gly	Leu	Ser	Glu	Pro	Gln	Phe	Val	Gln	Phe	Asn

210		215		220	
Gly Gly Phe Ser Gln Glu Gln Leu Asn Trp	Leu Asn Glu Val Leu Thr				
225		230		235	240
Phe Ser Asp Thr Asn Gln Glu Lys Val Val	Ile Val Ser His Leu Pro				
	245		250		255
Ile Tyr Pro Asp Ala Ser Asp Asn Val Cys	Leu Ala Trp Asn Tyr Arg				
	260		265		270
Asp Ala Leu Ala Val Ile Trp Ser His Glu Cys	Val Val Cys Phe Phe				
	275		280		285
Ala Gly His Thr His Asp Gly Gly Tyr Ser	Glu Asp Pro Phe Gly Val				
	290		295		300
Tyr His Val Asn Leu Glu Gly Val Ile Glu Thr	Ala Pro Asp Ser Gln				
305		310		315	320
Ala Phe Gly Thr Val His Val Tyr Pro Asp Lys	Met Met Leu Lys Gly				
	325		330		335
Arg Gly Arg Val Pro Asp Arg Ile Met Asn Tyr	Lys Lys Glu Arg Ala				
	340		345		350
Phe His Cys					
	355				

<210> 3393
 <211> 510
 <212> DNA
 <213> Homo sapiens

<400> 3393
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 180
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 300
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 360
 aagaagaatc tgcattggga tggcttggca atctggtaca caaaggatcg gatgcagcca
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<210> 3394
 <211> 170
 <212> PRT
 <213> Homo sapiens

<400> 3394
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 Cys Arg Leu Gly Met Gly Pro Gly Xaa Val Thr Pro Ser Ser Phe Val

	20		25		30										
Gly	Val	Trp	Ala	Gly	Ala	Thr	Ala	Ser	Arg	Gly	Gly	Ser	Asn	Phe	Glu
	35						40					45			
Tyr	Leu	Lys	Arg	Glu	His	Ser	Leu	Ser	Lys	Pro	Tyr	Gln	Gly	Val	Gly
	50					55					60				
Thr	Gly	Ser	Ser	Ser	Leu	Trp	Asn	Leu	Met	Gly	Asn	Xaa	Met	Val	Met
	65				70					75				80	
Thr	Gln	Tyr	Ile	Arg	Leu	Thr	Pro	Asp	Met	Gln	Ser	Lys	Gln	Gly	Ala
				85					90				95		
Leu	Trp	Asn	Arg	Val	Pro	Cys	Phe	Leu	Arg	Asp	Trp	Glu	Leu	Gln	Val
		100						105					110		
His	Phe	Lys	Ile	His	Gly	Gln	Gly	Lys	Lys	Asn	Leu	His	Gly	Asp	Gly
	115					120					125				
Leu	Ala	Ile	Trp	Tyr	Thr	Lys	Asp	Arg	Met	Gln	Pro	Gly	Pro	Val	Phe
	130					135					140				
Gly	Asn	Met	Asp	Lys	Phe	Val	Gly	Leu	Gly	Val	Phe	Val	Asp	Thr	Tyr
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<210> 3395

<211> 807

<212> DNA

<213> Homo sapiens

<400> 3395

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<210> 3396
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 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Glu Tyr Gln Ser Thr Ser Ala Ser Ala Ser Ala Ser Pro Phe Gln Ser
 50 55 60
 Ala Trp Tyr Ser Glu Ser Glu Ile Thr Gln Gly Ala Arg Ser Arg Ser
 65 70 75 80
 Gln Asn Gln Gln Arg Asp His Asp Ser Lys Arg Pro Lys Leu Ser Cys
 85 90 95
 Thr Asn Cys Thr Thr Ser Ala Gly Arg Asn Val Gly Asn Gly Leu Asn
 100 105 110
 Thr Leu Ser Asp Ser Ser Trp Arg His Ser Gln Val Pro Arg Ser Ser
 115 120 125
 Ser Met Val Leu Gly Ser Phe Gly Thr Asp Leu Met Arg Glu Arg Arg
 130 135 140
 Asp Leu Glu Arg Arg Thr Asp Ser Ser Ile Ser Asn Leu Met Asp Tyr
 145 150 155 160
 Ser His Arg Ser Gly Asp Phe Thr Thr Ser Ser Tyr Val Gln Asp Arg
 165 170 175
 Val Pro Ser Tyr Ser Gln Gly Ala Arg Pro Lys Glu Asn Ser Met Ser
 180 185 190
 Thr Leu Gln Leu Asn Thr Ser Ser Thr Asn His Gln Leu
 195 200 205

<210> 3397
 <211> 492
 <212> DNA
 <213> Homo sapiens

<400> 3397
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492

<210> 3398

<211> 163

<212> PRT

<213> Homo sapiens

<400> 3398

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Cys	Ser	Cys	Ser	Gln	Pro	Ala	Gly	Pro	Leu	Pro	Ala	Pro	Gly	Arg	Gly
			20					25					30		
Thr	Leu	Cys	Ser	Val	Pro	Ser	Leu	Glu	Gln	Gln	Gln	Pro	Gly	Xaa	Ala
		35					40					45			
Ala	Ser	Ala	Ile	Pro	Ser	Trp	Leu	Leu	Asn	Asp	Pro	Gly	Val	Glu	Xaa
	50					55				60					
Glu	Val	Met	Gly	Asp	Ala	Val	Leu	Glu	Ala	Ser	His	Asn	Val	Gln	Gly
65				70						75				80	
Cys	Gly	Cys	Ser	Trp	Val	Ser	His	Ser	Gly	Arg	Gly	Val	Gly	Pro	Glu
			85						90				95		
Ala	Glu	Gly	Ala	Gly	Ser	Pro	Gln	Ser	Leu	Gly	His	Gly	Ser	Gly	Gly
			100					105					110		
Trp	Ala	Ala	Arg	Arg	Cys	His	Cys	Leu	Ser	Val	Ala	Gly	Val	Ala	Ala
		115				120						125			
Ala	Ser	Gly	Cys	Pro	Arg	Thr	Glu	Glu	Ala	Ala	Trp	Gly	Glu	Ile	Leu
	130					135					140				
Arg	Glu	Gly	Leu	Ser	Ser	Pro	Cys	Ser	Cys	Ser	Pro	Gly	Pro	Pro	Gly
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Lys	Leu	Gly													

<210> 3399

<211> 5784

<212> DNA

<213> Homo sapiens

<400> 3399

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<210> 3400

<211> 1069

<212> PRT

<213> Homo sapiens

<400> 3400

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Cys	Asp	Val	Leu	Leu	Ile	Val	Gly	Asp	Gln	Lys	Phe	Arg	Ala	His	Lys
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	50				55					60					
Lys	Glu	Asn	Glu	Ser	Gln	Thr	Val	Phe	Gln	Leu	Asp	Phe	Cys	Glu	Pro
65			70					75						80	
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		85						90						95	
Val	Glu	Lys	Ser	Ser	Leu	Ala	Ala	Val	Gln	Glu	Leu	Gly	Tyr	Ser	Leu
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Phe	Pro	Thr	Cys	Pro	Asn	Arg	Lys	Lys	Val	Phe	Val	Glu	Asp	Asp	Glu
	130				135					140					
Asn	Ser	Ser	Gln	Lys	Arg	Ser	Val	Ile	Val	Cys	Gln	Ser	Arg	Asn	Glu
145			150					155						160	
Ala	Gln	Gly	Lys	Thr	Val	Ser	Gln	Asn	Gln	Pro	Asp	Val	Ser	His	Thr
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Ser	Arg	Pro	Ser	Pro	Ser	Ile	Ala	Val	Lys	Ala	Asn	Thr	Asn	Lys	Pro
	180					185							190		
His	Val	Pro	Lys	Pro	Ile	Glu	Pro	Leu	His	Asn	Leu	Ser	Leu	Thr	Glu
	195					200						205			
Lys	Ser	Trp	Pro	Lys	Asp	Ser	Ser	Val	Val	Tyr	Ala	Lys	Ser	Leu	Glu
	210				215					220					
His	Ser	Gly	Ser	Leu	Asp	Asp	Pro	Asn	Arg	Ile	Ser	Leu	Val	Lys	Arg

2578

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Tyr	Ile	Cys	Thr	Tyr	Cys	Gly
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Lys	Gln	His	Ile	Lys	Met	His
	690					
Lys	Val	Ala	Lys	Pro	Lys	Glu
705						
Asn	Lys	Glu	Val	Tyr	Gln	Cys
Leu	Leu	Glu	Gln	Gly	Ser	His
Cys	Pro	Tyr	Cys	Ser	Leu	Arg
His	Glu	Ser	Lys	Cys	Glu	Tyr
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Arg	Thr	Phe	Lys	Ser	Ser	Phe
785						
His	Asn	Gln	Asn	Asn	Met	Ala
Leu	Asp	His	Asn	Gly	Asp	Val
Pro	Glu	Pro	Asn	Lys	Val	Asn
Val	Phe	Ser	Asp	Ser	Ser	Glu
850						
Ser	Cys	Leu	Pro	Glu	Asp	Leu
865						
Val	Lys	Glu	Glu	Pro	Val	Glu
Ser	Thr	Ala	Pro	Lys	Glu	Ala
Pro	Cys	Glu	Lys	Cys	Gly	Lys
915						
Arg	His	Gln	Glu	Leu	Leu	Cys
930						
Cys	Asn	Lys	Ala	Phe	Arg	Thr
945						
Ser	His	Met	Ser	Gln	Ala	Ser
Val	Cys	Pro	Val	Pro	Thr	Asn
Pro	Pro	Pro	Leu	Pro	Lys	Ile
Gly	Leu	Ser	Glu	Asn	Pro	Thr
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<210> 3401

<211> 579

<212> DNA

<213> Homo sapiens

<400> 3401

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 300
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 360
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 420
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 480
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<210> 3402

<211> 148

<212> PRT

<213> Homo sapiens

<400> 3402

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		20						25					30		
Val	Tyr	Thr	Arg	Leu	Gly	Glu	Met	Asn	Asn	Ala	Val	Arg	Asn	Leu	Gln
		35					40					45			
Glu	Leu	Glu	Glu	Leu	Asp	Ser	Ser	Ser	Ser	Leu	Cys	Val	Leu	Val	Ser
	50					55					60				
Thr	Val	Gly	Lys	Leu	Cys	Arg	Leu	Ile	Asn	Glu	Asp	Val	Asn	Glu	Gln
65					70					75				80	
Val	Met	Gln	Val	Leu	Gly	Pro	Glu	Asp	Leu	Gln	Ser	Ile	Ile	Tyr	Lys
			85					90						95	
Leu	Glu	Glu	His	Glu	Glu	Phe	Phe	Pro	Ala	Phe	Gln	Ala	Phe	Thr	Asn
			100					105						110	
Asp	Leu	Leu	Glu	Ile	Leu	Glu	Ile	Asp	Asp	Ser	Gly	Cys	His	Cys	Thr
		115					120					125			
Cys	Ser	Lys	Glu	Ile	Lys	Ser	Thr	Phe	Ile	Leu	Lys	Thr	Asn	Gln	Ile
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<210> 3403

<211> 1696

<212> DNA

<213> Homo sapiens

<400> 3403

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<210> 3404

<211> 286

<212> PRT

<213> Homo sapiens

<400> 3404

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		20					25						30		
Ala	Ser	Glu	Cys	Thr	Glu	Leu	Pro	Lys	Ala	Glu	Lys	Trp	Arg	Arg	Gln
	35						40					45			
Ile	Ile	Gly	Glu	Ile	Ser	Lys	Lys	Val	Ala	Gln	Ile	Gln	Asn	Ala	Gly
	50					55					60				
Leu	Gly	Glu	Phe	Arg	Ile	Arg	Asp	Leu	Asn	Asp	Glu	Ile	Asn	Lys	Leu
65				70					75					80	
Leu	Arg	Glu	Lys	Gly	His	Trp	Glu	Val	Arg	Ile	Lys	Glu	Leu	Gly	Gly
			85					90						95	
Pro	Asp	Tyr	Gly	Lys	Val	Gly	Pro	Lys	Met	Leu	Asp	His	Glu	Gly	Lys
		100					105						110		
Glu	Val	Pro	Gly	Asn	Arg	Gly	Tyr	Lys	Tyr	Phe	Gly	Ala	Ala	Lys	Asp
	115						120					125			
Leu	Pro	Gly	Val	Arg	Glu	Leu	Phe	Glu	Lys	Xaa	Thr	Ser	Ser	Ser	Ser
	130					135					140				
Gln	Xaa	Lys	Thr	Arg	Ala	Glu	Leu	Met	Lys	Ala	Ile	Asp	Phe	Glu	Tyr
145					150					155				160	
Tyr	Gly	Tyr	Leu	Asp	Glu	Asp	Asp	Gly	Val	Ile	Val	Pro	Leu	Glu	Gln
			165					170						175	
Glu	Tyr	Glu	Lys	Lys	Leu	Arg	Ala	Glu	Leu	Val	Glu	Lys	Trp	Lys	Ala
		180						185					190		
Glu	Arg	Glu	Ala	Arg	Leu	Ala	Arg	Gly	Glu	Lys	Glu	Glu	Glu	Glu	Glu
	195						200					205			
Glu	Glu	Glu	Glu	Ile	Asn	Ile	Tyr	Ala	Val	Thr	Glu	Glu	Glu	Ser	Asp
	210					215					220				
Glu	Glu	Gly	Ser	Gln	Glu	Lys	Gly	Gly	Asp	Asp	Ser	Gln	Gln	Lys	Phe
225					230					235				240	
Ile	Ala	His	Val	Pro	Val	Pro	Ser	Gln	Gln	Glu	Ile	Glu	Glu	Ala	Leu
			245					250						255	
Val	Arg	Arg	Lys	Lys	Met	Glu	Leu	Leu	Gln	Lys	Tyr	Ala	Ser	Glu	Thr
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<210> 3405

<211> 402

<212> DNA

<213> Homo sapiens

<400> 3405

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<210> 3406

<211> 134

<212> PRT

<213> Homo sapiens

<400> 3406

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Asp Arg Gly Leu Lys Thr Leu Glu Asn Leu Leu Ala Ser Ile Arg Lys
35     40     45
Gly Asn Ala Ile Asp Glu Ala Asp Ile Pro Pro Pro Val Ala Ile Gly
50     55     60
Lys Gly Pro Ala Ser Thr Pro Thr Tyr Ser Pro Ala Pro Thr Gln Pro
65     70     75     80
Ala Pro Arg Ile Ala Ser Ala Pro Glu Pro Arg Val Thr Leu Glu Gly
85     90     95
Pro Ser Ala Thr Ala Pro Ala Ser Ser Pro Gly Leu Ala Lys Pro Gln
100    105    110
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115    120    125
Pro Ala Arg Leu Gln Ala
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<210> 3407

<211> 535

<212> DNA

<213> Homo sapiens

<400> 3407

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120

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<210> 3408

<211> 131

<212> PRT

<213> Homo sapiens

<400> 3408

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			20				25					30			
Val	Ala	Ala	Pro	Thr	Gly	Pro	Gly	Gly	Thr	Phe	Pro	Gly	His	Pro	Thr
			35			40					45				
Ser	Ser	Val	Ala	Arg	Gln	Val	Ala	Ala	Pro	Thr	Gly	Pro	Ala	Gly	Thr
	50				55					60					
Phe	Pro	Gly	Xaa	Pro	Gly	Leu	Leu	Gly	Lys	Gln	Val	Ala	Ala	Pro	Thr
65					70				75					80	
Gly	Pro	Gly	Gly	Thr	Phe	Pro	Gly	His	Leu	Ala	Ser	Ser	Ala	Arg	Gln
				85				90					95		
Val	Ala	Glu	Leu	Val	Pro	Arg	Leu	Ile	Phe	Leu	Arg	Gln	Thr	Cys	Leu
			100				105					110			
Gln	Arg	Lys	Leu	Cys	Ser	Thr	Gly	Glu	Thr	Gly	Lys	Cys	Thr	Arg	Tyr
		115				120					125				
Trp	Leu	Ile													
		130													

<210> 3409

<211> 959

<212> DNA

<213> Homo sapiens

<400> 3409

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 180
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<210> 3410

<211> 144

<212> PRT

<213> Homo sapiens

<400> 3410

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<211> 958

<212> DNA

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

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 Thr Val Gly Lys Leu Lys Thr His Leu Ser Asn Val Tyr Pro Ser Lys
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 Pro Leu Thr Lys Asp Gln Arg Leu Val Tyr Ser Gly Arg Leu Leu Pro
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 Asp His Leu Gln Leu Lys Asp Ile Leu Arg Lys Gln Asp Glu Tyr His
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<212> DNA
<213> Homo sapiens
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<212> PRT

<213> Homo sapiens

<400> 3414

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			20					25					30		
Tyr	Gly	Cys	Val	Gln	Gln	Pro	Lys	Thr	Gln	Glu	Ser	Lys	Leu	Lys	Ile
		35					40					45			
Gly	Gly	Val	Ser	Ser	Val	Asn	Glu	Arg	Pro	Ile	Ala	Gln	Gln	Leu	Asn
	50					55				60					
Pro	Gly	Phe	Gln	Leu	Ser	Phe	Ala	Ser	Ser	Gly	Pro	Ser	Val	Leu	Leu
65				70					75					80	
Pro	Ser	Val	Pro	Ala	Val	Ala	Ile	Lys	Val	Phe	Cys	Ser	Gly	Cys	Lys
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Lys	Met	Leu	Tyr	Lys	Gly	Gln	Thr	Ala	Tyr	His	Lys	Thr	Gly	Ser	Thr
		100					105						110		
Gln	Leu	Phe	Cys	Ser	Thr	Arg	Cys	Ile	Thr	Arg	His	Ser	Ser	Pro	Ala
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Cys	Leu	Pro	Pro	Pro	Lys	Lys	Thr	Cys	Thr	Asn	Cys	Ser	Lys	Asp	
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Cys	Ser	Met	Cys	Gln	Lys	Asn	Ala	Asp	Thr	Arg	Phe	Glu	Val	Lys	Tyr

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Gln Gln Val Ala Leu Thr His Thr Val Val Lys Leu Lys Cys Gln His		415
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	450	455
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	515	520
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<212> DNA

<213> Homo sapiens

<400> 3415

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<400> 3416

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	115					120						125			
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 Asp Val Val Lys Ile Thr Ile Asp Trp Asn Lys Leu Gln Ser Leu Ser
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 Ala Phe Gln Pro Ala Leu Leu Phe Ser Ala Leu Glu Gln His Ile Leu

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<210> 3422

<211> 418

<212> PRT

<213> Homo sapiens

<400> 3422

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<210> 3423
<211> 1851

<212> DNA

<213> Homo sapiens

<400> 3423

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<210> 3424

<211> 136

<212> PRT

<213> Homo sapiens

<400> 3424

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Gln	Arg	Trp	Val	Ile	Gly	Arg	Cys	Leu	Cys	Val	Pro	Glu	Arg	Ser	Leu
			20					25					30		
Ala	Ser	Tyr	Gly	Val	Arg	Gln	Asp	Gly	Asp	Pro	Ala	Phe	Leu	Tyr	Leu
			35				40						45		
Leu	Ser	Ala	Pro	Arg	Glu	Ala	Pro	Ala	Thr	Gly	Pro	Ser	Pro	Gln	His
	50					55					60				
Pro	Gln	Lys	Met	Asp	Gly	Glu	Leu	Gly	Arg	Leu	Phe	Pro	Pro	Ser	Leu
65				70					75					80	
Gly	Leu	Pro	Pro	Gly	Pro	Gln	Pro	Ala	Ala	Ser	Ser	Leu	Pro	Ser	Pro
				85					90					95	
Leu	Gln	Pro	Ser	Trp	Ser	Cys	Pro	Ser	Cys	Thr	Phe	Ile	Asn	Ala	Pro
			100					105					110		
Asp	Arg	Pro	Gly	Cys	Glu	Met	Cys	Ser	Thr	Gln	Arg	Pro	Cys	Thr	Trp
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<210> 3425

<211> 1416

<212> DNA

<213> Homo sapiens

<400> 3425

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 1320
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<210> 3426

<211> 410

<212> PRT

<213> Homo sapiens

<400> 3426

Ser Gly Gly Lys Gly Leu Cys Cys Cys Ala Arg Ala Gly Ala Ala Ala
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 20 25 30
 Ser Leu Gly Arg Asp Pro Gly Arg Glu Glu Glu Val Arg Pro Arg Gly
 35 40 45
 Arg Lys Ala Ala Ser Pro Gly Ala Pro Arg Pro Trp Pro Arg His Ser
 50 55 60
 Thr His Met Ala Ser Gly Val Gly Ala Ala Phe Glu Glu Leu Pro His

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<210> 3427
<211> 580
<212> DNA
<213> Homo sapiens
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120
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 480
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<210> 3428

<211> 132

<212> PRT

<213> Homo sapiens

<400> 3428

Met	Asp	Ser	Leu	Ala	Leu	Ser	Asn	Ile	Thr	Gly	Ala	Ser	Val	Asp	Gly
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Glu	Asn	Lys	Pro	Arg	Pro	Ser	Leu	Tyr	Ser	Leu	Gln	Asn	Phe	Glu	Glu
			20					25					30		
Met	Glu	Thr	Glu	Asp	Cys	Glu	Lys	Met	Ser	Asn	Met	Gly	Thr	Leu	Asn
			35				40					45			
Ser	Ser	Met	Leu	His	Arg	Ser	Ala	Glu	Ser	Leu	Lys	Ser	Leu	Ser	Ser
			50				55				60				
Glu	Leu	Cys	Pro	Glu	Lys	Ile	Leu	Pro	Glu	Glu	Lys	Pro	Val	His	Leu
			65			70				75				80	
Pro	Val	Leu	Arg	Arg	Ser	Lys	Ser	Gln	Ser	Arg	Pro	Gln	Gln	Val	Lys
			85					90					95		
Phe	Ser	Asp	Asp	Val	Ile	Asp	Asn	Gly	Asn	Tyr	Asp	Ile	Glu	Ile	Arg
			100					105					110		
Gln	Pro	Pro	Met	Ser	Glu	Arg	Thr	Arg	Arg	Arg	Val	Tyr	Asn	Phe	Glu
			115				120						125		
Glu	Arg	Gly	Ser												
			130												

<210> 3429

<211> 634

<212> DNA

<213> Homo sapiens

<400> 3429

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<210> 3430

<211> 122

<212> PRT

<213> Homo sapiens

<400> 3430

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Arg	Arg	Ser	Leu	His	Glu	Gln	Val	His	Gln	Gly	Pro	Val	Pro	Leu	Ser
		20					25						30		
Tyr	Thr	Val	Thr	Thr	Val	Thr	Thr	Gln	Gly	Phe	Pro	Leu	Pro	Thr	Gly
		35				40						45			
Gln	His	Ile	Pro	Gly	Cys	Ser	Ala	Gln	Gln	Leu	Pro	Ala	Cys	Ser	Val
	50				55					60					
Met	Phe	Ser	Gly	Gln	His	Tyr	Pro	Leu	Cys	Cys	Leu	Pro	Pro	Pro	Leu
65					70				75					80	
Ile	Gln	Ala	Cys	Thr	Met	Gln	Gln	Leu	Pro	Val	Pro	Tyr	Gln	Ala	Tyr
			85					90					95		
Pro	His	Leu	Ile	Ser	Ser	Asp	His	Tyr	Ile	Leu	His	Pro	Pro	Pro	Pro
		100						105					110		
Gly	Thr	His	Pro	Ala	Ala	Pro	Gly	Ser	Val						
		115					120								

<210> 3431

<211> 1396

<212> DNA

<213> Homo sapiens

<400> 3431

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 180
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 240

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 420
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<210> 3432

<211> 296

<212> PRT

<213> Homo sapiens

<400> 3432

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 Arg Val Ala Leu Ala Gly Glu Leu Val Gly Val Gly Gly His Phe Leu
 35 40 45
 Phe Leu Gly Leu Ala Leu Val Ser Lys Asp Trp Arg Phe Leu Gln Arg

50	55	60
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65	70	75
Leu Phe Leu Glu Ser Ala Arg Trp Leu Ile Val Lys Arg Gln Ile Glu		80
	85	90
Glu Ala Gln Ser Val Leu Arg Ile Leu Ala Glu Arg Asn Arg Pro His		95
	100	105
Gly Gln Met Leu Gly Glu Glu Ala Gln Glu Ala Leu Gln Asp Leu Glu		110
	115	120
Asn Thr Cys Pro Leu Pro Ala Thr Ser Ser Phe Ser Phe Ala Ser Leu		125
	130	135
Leu Asn Tyr Arg Asn Ile Trp Lys Asn Leu Leu Ile Leu Gly Phe Thr		140
	145	150
Asn Phe Ile Ala His Ala Ile Arg His Cys Tyr Gln Pro Val Gly Gly		155
	165	170
Gly Gly Ser Pro Ser Asp Phe Tyr Leu Cys Ser Leu Leu Ala Ser Gly		175
	180	185
Thr Ala Ala Leu Ala Cys Val Phe Leu Gly Val Thr Val Asp Arg Phe		190
	195	200
Gly Arg Arg Gly Ile Leu Leu Leu Ser Met Thr Leu Thr Gly Ile Ala		205
	210	215
Ser Leu Val Leu Leu Gly Leu Trp Asp Cys Glu His Pro Ile Phe Pro		220
	225	230
Thr Val Trp Ala Gln Gln Gly Asn Pro Asn Arg Asp Leu Asn Glu Ala		235
	245	250
Ala Ile Thr Thr Phe Ser Val Leu Gly Leu Phe Ser Ser Gln Ala Ala		255
	260	265
Ala Ile Leu Ser Thr Leu Leu Ala Ala Glu Val Ile Pro Thr Thr Val		270
	275	280
Arg Gly Arg Gly Leu Gly Leu Ile		285
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<210> 3433

<211> 1257

<212> DNA

<213> Homo sapiens

<400> 3433

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<211> 311

<212> PRT

<213> Homo sapiens

<400> 3434

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Gly	Gly	Gly	Gln	Gly	Val	Pro	Val	Val	Ser	Val	Val	Pro	Tyr	Asp	Ser
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Ile	Leu	Pro	Ser	Arg	Ala	Leu	Pro	Pro	Cys	Leu	Tyr	His	Asn	Leu	Pro		
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Ser	Ile	Tyr	Thr	Ile	Leu	Leu	Ser	Arg	Pro	Ser	Pro	Leu	Pro	Tyr	Leu		
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Ile	Pro	Pro	Pro	Arg	Leu	His	Asn	Pro	Pro	Val	Tyr	Thr	Thr	Met	Ser		
	275						280							285			
Pro	Ser	Ser	Ala	Pro	Ser	Ser	Cys	Leu	His	Trp	His	His	Cys	Pro	Ser		
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Tyr	Thr	Thr	Thr	Pro	Ser	Thr											
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<210> 3435

<211> 1225

<212> DNA

<213> Homo sapiens

<400> 3435

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180
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840

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<210> 3436

<211> 408

<212> PRT

<213> Homo sapiens

<400> 3436

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 35 40 45
 Glu Ser Asp Gly Ser Gln Cys Gln His Trp Val Arg Leu Thr Met Lys
 50 55 60
 Lys Gly Thr Ile Val Lys Lys Leu Leu Leu Ala Val Asp Thr Thr Asp
 65 70 75 80
 Asp Asn Phe Met Pro Lys Arg Val Val Val Tyr Gly Gly Glu Gly Asp
 85 90 95
 Asn Leu Lys Lys Leu Ser Asp Val Ser Ile Asp Xaa Arg Pro Ser Ser
 100 105 110
 Gly Xaa Val Cys Val Leu Glu Asp Met Thr Val His Leu Pro Ile Ile
 115 120 125
 Glu Ile Arg Ile Val Glu Cys Arg Asp Asp Gly Ile Asp Val Arg Leu
 130 135 140
 Arg Gly Val Lys Ile Lys Ser Ser Arg Gln Arg Glu Leu Gly Leu Asn
 145 150 155 160
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 165 170 175
 Gly Thr Asp Pro Glu Val Leu Tyr Arg Arg Ala Val Leu Leu Gln Arg
 180 185 190
 Phe Ile Lys Ile Leu Asp Ser Val Leu His His Leu Val Pro Ala Trp
 195 200 205
 Asp His Thr Leu Gly Thr Phe Ser Glu Ile Lys Gln Val Lys Gln Phe
 210 215 220
 Leu Leu Leu Ser Arg Gln Arg Pro Gly Leu Val Ala Gln Cys Leu Arg
 225 230 235 240
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<210> 3437
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<212> DNA
<213> Homo sapiens
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240
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780
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840

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 2081

<210> 3438

<211> 105

<212> PRT

<213> Homo sapiens

<400> 3438

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<210> 3439
<211> 1519
<212> DNA
<213> Homo sapiens
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 1380
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<210> 3440

<211> 287

<212> PRT

<213> Homo sapiens

<400> 3440

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			20					25					30		
Val	Ala	Ala	Ala	Ala	Arg	Trp	Pro	Arg	Gln	Pro	Arg	His	Pro	Arg	His
			35					40				45			
Thr	Ser	Pro	Met	Pro	Pro	Pro	Ala	Ala	Leu	Arg	Pro	Pro	Ala	Gly	Pro
			50				55				60				
Arg	Arg	Pro	Arg	Xaa	Pro	Gly	Gly	Pro	Gln	His	His	Gln	Pro	Gln	Pro
65					70				75					80	
Pro	Leu	Trp	Thr	Pro	Thr	Pro	Pro	Ser	Pro	Ala	Ser	Asp	Trp	Pro	Pro
					85				90					95	
Leu	Pro	Pro	Asn	Arg	Pro	Pro	Gln	Asn	Pro	Gly	Pro	Thr	Leu	Pro	Trp
			100					105				110			
Arg	Gln	Arg	Asp	Lys	Gly	Gly	Pro	Ser	Pro	Leu	Pro	Glu	Ala	Arg	Thr
			115				120					125			
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			130				135				140				
Phe	Leu	Ser	Ala	Pro	Leu	Val	Pro	Arg	Ser	Pro	Gly	Gly	Glu	Ser	Ala
145					150					155				160	
Asp	Ser	Ser	Gln	Ala	Gly	Thr	Arg	Leu	Val	Pro	Glu	His	Ala	Ala	Ala
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His	Thr	Gln	Gly	His	Gly	Pro	Ser	Gly	Pro	Gly	Thr	Trp	Ser	Gly	Ser
			180					185					190		
Glu	Arg	Pro	Gly	Cys	Leu	Ala	Asp	Arg	Thr	Ser	Glu	Thr	Thr	Gln	Pro
			195				200					205			
Ser	Phe	Glu	Asp	Ala	Pro	Ala	Gln	Pro	Ser	Pro	Gly	Val	Pro	Trp	Arg
			210				215				220				
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225					230					235				240	
Gly	Arg	Gln	Ala	Ser	Thr	Pro	Thr	Leu	Gly	Asn	Ala	Glu	Pro	Leu	Arg
				245					250					255	
Met	Cys	Ala	Arg	Gly	Arg	Val	Cys	Val	Phe	Leu	Arg	Val	Ser	Leu	Phe

	260		265		270
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		Leu	Cys	Met	Leu
		Val			
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<210> 3441

<211> 2074

<212> DNA

<213> Homo sapiens

<400> 3441

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1320

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<210> 3442

<211> 374

<212> PRT

<213> Homo sapiens

<400> 3442

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 35 40 45
 Thr Val Asp Pro Cys His Lys Phe Thr Trp Cys Leu Asp Ala Cys Ile
 50 55 60
 Arg Glu Arg Phe Val Asp Ser Lys Arg Ala Arg Glu Leu Gln Gly Phe
 65 70 75 80
 Leu Asp Asp Val Lys Lys Gly Gln Glu Gln Val Leu Gly Asp Leu Ser
 85 90 95
 Met Ile Leu Cys Asp Pro Phe Ala Ile Asn Thr Leu Ala Leu Ser Thr
 100 105 110
 Val Arg His Leu Gln Glu Leu Val Gly Gln Glu Thr Leu Pro Arg Asp
 115 120 125
 Ser Pro Asp Leu Leu Leu Leu Leu Arg Leu Leu Ala Leu Gly Gln Gly
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<210> 3443
<211> 2070
<212> DNA
<213> Homo sapiens
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2070

<210> 3444

<211> 579

<212> PRT

<213> Homo sapiens

<400> 3444

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 20 25 30
 Ser Glu Asn Val Glu Lys Ser Lys Ala Tyr Lys Leu Asn Pro Lys Phe
 35 40 45
 Cys Ser Leu Ser Phe Gln Ala Thr Lys Cys Lys Leu Ala Gly Leu Glu
 50 55 60
 Val Leu Ser Asp Asp Pro Asp Leu Val Lys Val Val Glu Ser Leu Thr
 65 70 75 80
 Cys Gly Lys Ile Phe Ala Val Glu Ile Leu Asp Lys Ala Asp Ile Pro
 85 90 95
 Leu Val Val Leu Tyr Asp Thr Ser Gly Glu Asp Asp Ile Asn Ile Asn
 100 105 110
 Ala Thr Cys Leu Lys Ala Ile Cys Asp Lys Ser Leu Glu Val His Leu
 115 120 125
 Gln Val Asp Ala Met Tyr Thr Asn Val Lys Ile Thr Asn Ile Cys Ser
 130 135 140
 Asp Gly Thr Leu Tyr Cys Gln Val Pro Cys Lys Gly Leu Asn Lys Leu
 145 150 155 160
 Ser Asp Leu Leu Arg Lys Ile Glu Asp Tyr Phe His Cys Lys His Met
 165 170 175
 Thr Ser Glu Cys Phe Val Ser Leu Pro Phe Cys Gly Lys Ile Cys Leu
 180 185 190
 Phe His Cys Lys Gly Lys Trp Leu Arg Val Glu Ile Thr Asn Val His
 195 200 205
 Ser Ser Arg Ala Leu Asp Val Gln Phe Leu Asp Ser Gly Thr Val Thr
 210 215 220
 Ser Val Lys Val Ser Glu Leu Arg Glu Ile Pro Pro Arg Phe Leu Gln
 225 230 235 240
 Glu Met Ile Ala Ile Pro Pro Gln Ala Ile Lys Cys Cys Leu Ala Asp
 245 250 255
 Leu Pro Gln Ser Ile Gly Met Trp Thr Pro Asp Ala Val Leu Trp Leu
 260 265 270
 Arg Asp Ser Val Leu Asn Cys Ser Asp Cys Ser Ile Lys Val Thr Lys
 275 280 285
 Val Asp Glu Thr Arg Gly Ile Ala His Val Tyr Leu Phe Thr Pro Lys
 290 295 300
 Asn Phe Pro Asp Pro His Arg Ser Ile Asn Arg Gln Ile Thr Asn Ala
 305 310 315 320
 Asp Leu Trp Lys His Gln Lys Asp Val Phe Leu Ser Ala Ile Ser Ser
 325 330 335
 Gly Ala Asp Ser Pro Asn Ser Lys Asn Gly Asn Met Pro Met Ser Gly
 340 345 350
 Asn Thr Gly Glu Asn Phe Arg Lys Asn Leu Thr Asp Val Ile Lys Lys
 355 360 365
 Ser Met Val Asp His Thr Ser Ala Phe Ser Thr Glu Glu Leu Pro Pro
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 Pro Val His Leu Ser Lys Pro Gly Glu His Met Asp Val Tyr Val Pro
 385 390 395 400
 Val Ala Cys His Pro Gly Tyr Phe Val Ile Gln Pro Trp Gln Glu Ile

405										410					415					
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Lys	Val	Glu	Asn	Lys	Trp	His	Arg	Val	Leu	Leu	Lys	Gly	Ile	Leu	Thr					
450										455					460					
Asn	Gly	Leu	Val	Ser	Val	Tyr	Glu	Leu	Asp	Tyr	Gly	Lys	His	Glu	Leu					
465										470					475					
Val	Asn	Ile	Arg	Lys	Val	Gln	Pro	Leu	Val	Asp	Met	Phe	Arg	Lys	Leu					
485										490					495					
Pro	Phe	Gln	Ala	Val	Thr	Ala	Gln	Leu	Ala	Gly	Val	Lys	Cys	Asn	Gln					
500										505					510					
Trp	Ser	Glu	Glu	Ala	Ser	Met	Val	Phe	Arg	Asn	His	Val	Glu	Lys	Lys					
515										520					525					
Pro	Leu	Val	Ala	Leu	Val	Gln	Thr	Val	Ile	Glu	Asn	Ala	Asn	Pro	Trp					
530										535					540					
Asp	Arg	Lys	Val	Val	Val	Tyr	Leu	Val	Asp	Thr	Ser	Leu	Pro	Asp	Thr					
545										550					555					
Asp	Thr	Trp	Ile	His	Asp	Phe	Met	Ser	Glu	Tyr	Leu	Ile	Glu	Leu	Ser					
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<210> 3445

<211> 2086

<212> DNA

<213> Homo sapiens

<400> 3445

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180	gccttagaag	gagagagctt	tgcgctgtct	ttctcctccg	cctctgatgc
240	gctgtggttg	gatattttaga	ggacattatc	atggatgacg	agttccagtt
300	aatttcatgg	acaagtacta	cctggagttt	gaagacacag	aagagaataa
360	acacctattt	ttaatgaata	catttctttg	gtagaaaaat	acattgaaga
420	cagcggattc	ctgagttcaa	catggcagcc	ttcaccacaa	cattacacca
480	ttgaggcacc	ataaggatga	agtggctggg	gacatattcg	acatgctgct
540	gattttctgg	cttttaaaga	aatgtttttg	gactacagag	cagaaaaaga
600	ctggacttaa	gcagtggctt	agtggtgact	tcattgtgca	aatcatcttc
660	tcccagaaca	atctgcggca	ctaggtccta	cctccagcca	atgaatggga
720					

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1980
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2086

<210> 3446

<211> 169

<212> PRT

<213> Homo sapiens

<400> 3446

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20	25	30	
Met Asp Asp Glu Phe Gln Leu Leu Gln Arg Asn Phe Met Asp Lys Tyr			
35	40	45	
Tyr Leu Glu Phe Glu Asp Thr Glu Glu Asn Lys Leu Ile Tyr Thr Pro			
50	55	60	
Ile Phe Asn Glu Tyr Ile Ser Leu Val Glu Lys Tyr Ile Glu Glu Gln			
65	70	75	80
Leu Leu Gln Arg Ile Pro Glu Phe Asn Met Ala Ala Phe Thr Thr Thr			
85	90	95	
Leu His His Leu Phe Arg Leu Arg His His Lys Asp Glu Val Ala Gly			
100	105	110	
Asp Ile Phe Asp Met Leu Leu Thr Phe Thr Asp Phe Leu Ala Phe Lys			
115	120	125	
Glu Met Phe Leu Asp Tyr Arg Ala Glu Lys Glu Gly Arg Gly Leu Asp			
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Leu Ser Ser Gly Leu Val Thr Ser Leu Cys Lys Ser Ser Ser Leu			
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Pro Ala Ser Gln Asn Asn Leu Arg His			
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<210> 3447

<211> 936

<212> DNA

<213> Homo sapiens

<400> 3447

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 240
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 360
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 420
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 480
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 720
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 780

cagtaccaag ctcattgtcag cggcttcaaa cacaagaacc agtcaccaa aacagtggca
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 936

<210> 3448

<211> 302

<212> PRT

<213> Homo sapiens

<400> 3448

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Val	Gln	Ala	Ala	Asp	Gly	Gly	Ala	Ala	Gly	Pro	Tyr	Ser	Ser	Ser	Glu
		20					25						30		
Leu	Leu	Glu	Gly	Gln	Glu	Pro	Asp	Gly	Val	Arg	Phe	Asp	Arg	Glu	Arg
	35					40					45				
Ala	Arg	Arg	Leu	Trp	Glu	Ala	Val	Ser	Gly	Ala	Gln	Pro	Val	Gly	Arg
	50					55				60					
Glu	Glu	Val	Glu	His	Met	Ile	Gln	Lys	Asn	Gln	Cys	Leu	Phe	Thr	Asn
65				70					75					80	
Thr	Gln	Cys	Lys	Val	Cys	Cys	Ala	Leu	Leu	Ile	Ser	Glu	Ser	Gln	Lys
			85					90						95	
Leu	Ala	His	Tyr	Gln	Ser	Lys	Lys	His	Ala	Asn	Lys	Val	Lys	Arg	Tyr
	100						105					110			
Leu	Ala	Ile	His	Gly	Met	Glu	Thr	Leu	Lys	Gly	Glu	Thr	Lys	Lys	Leu
	115						120					125			
Asp	Ser	Asp	Gln	Lys	Ser	Ser	Arg	Ser	Lys	Asp	Lys	Asn	Gln	Cys	Cys
	130					135					140				
Pro	Ile	Cys	Asn	Met	Thr	Phe	Ser	Ser	Pro	Val	Val	Ala	Gln	Ser	His
145				150					155					160	
Tyr	Leu	Gly	Lys	Thr	His	Ala	Lys	Asn	Leu	Lys	Leu	Lys	Gln	Gln	Ser
			165					170					175		
Thr	Lys	Val	Glu	Ala	Leu	His	Gln	Asn	Arg	Glu	Met	Ile	Asp	Pro	Asp
		180					185						190		
Lys	Phe	Cys	Ser	Leu	Cys	His	Ala	Thr	Phe	Asn	Asp	Pro	Val	Met	Ala
	195						200					205			
Gln	Gln	His	Tyr	Val	Gly	Lys	Lys	His	Arg	Lys	Gln	Glu	Thr	Lys	Leu
	210					215					220				
Lys	Leu	Met	Ala	Arg	Tyr	Gly	Arg	Leu	Ala	Asp	Pro	Ala	Val	Thr	Asp
225				230					235					240	
Phe	Pro	Ala	Gly	Lys	Gly	Tyr	Pro	Cys	Lys	Thr	Cys	Lys	Ile	Val	Leu
			245					250						255	
Asn	Ser	Ile	Glu	Gln	Tyr	Gln	Ala	His	Val	Ser	Gly	Phe	Lys	His	Lys
		260					265					270			
Asn	Gln	Ser	Pro	Lys	Thr	Val	Ala	Ser	Ser	Leu	Gly	Gln	Ile	Pro	Met
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Gln	Arg	Gln	Pro	Ile	Gln	Lys	Asp	Ser	Thr	Thr	Leu	Glu	Asp		
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<210> 3449

<211> 877

<212> DNA

<213> Homo sapiens

<400> 3449

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120
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180
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240
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720
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780
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<210> 3450

<211> 276

<212> PRT

<213> Homo sapiens

<400> 3450

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 20           25           30
Ser Val Thr Ala Asn Ser Gln Ser Pro Ala Leu Leu Ala Gly Thr Asn
 35           40           45
Pro Val Ala Val Val Ala Asp Gly Gly Ser Cys Pro Ala His Tyr Pro
 50           55           60
Val His Glu Cys Val Phe Lys Gly Asp Val Arg Arg Leu Ser Ser Leu
 65           70           75           80
Ile Arg Thr His Asn Ile Gly Gln Lys Asp Asn His Gly Asn Thr Pro
 85           90           95
Leu His Leu Ala Val Met Leu Gly Asn Lys Glu Cys Ala His Leu Leu

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100	105	110
Leu Ala His Asn Ala Pro Val Lys Val Lys Asn Ala Gln Gly Trp Ser		
115	120	125
Pro Leu Ala Glu Ala Ile Ser Tyr Gly Asp Arg Gln Met Ile Thr Ala		
130	135	140
Leu Leu Arg Lys Leu Lys Gln Gln Ser Arg Glu Ser Val Glu Glu Lys		
145	150	155
Arg Pro Arg Leu Leu Lys Ala Leu Lys Glu Leu Gly Asp Phe Tyr Leu		
165	170	175
Glu Leu His Trp Asp Phe Gln Ser Trp Val Pro Leu Leu Ser Arg Ile		
180	185	190
Leu Pro Ser Asp Ala Cys Lys Ile Tyr Lys Gln Gly Ile Asn Ile Arg		
195	200	205
Leu Asp Thr Thr Leu Ile Asp Phe Thr Asp Met Lys Cys Gln Arg Gly		
210	215	220
Asp Leu Ser Phe Ile Phe Asn Gly Asp Ala Ala Pro Ser Glu Ser Phe		
225	230	235
Val Val Leu Asp Asn Glu Gln Lys Val Tyr Gln Arg Ile His His Glu		
245	250	255
Ala His Ile Pro Gly Ile Arg Asp Gly Asn Arg Arg Arg Gly Gly Tyr		
260	265	270
Phe Asn Glu Gln		
275		

<210> 3451

<211> 595

<212> DNA

<213> Homo sapiens

<400> 3451

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480
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595

<210> 3452

<211> 192

<212> PRT

<213> Homo sapiens

<400> 3452

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 Glu Arg Gln Ser His Pro Ala Thr Gln Gln Gln Leu Gly Lys Thr Leu
 35 40 45
 Gln Ser Lys Gln Leu Pro Gln Val Pro Arg Pro Leu Gln Leu Phe Ser
 50 55 60
 Ala Lys Glu Leu Arg Asp Ser Ser Ile Asp Thr His Gln Tyr His Glu
 65 70 75 80
 Gly Leu Ser Lys Ala Thr Gln Asp Gln Ile Leu Gln Thr Leu Ile Gln
 85 90 95
 Arg Val Arg Arg Gln Asn Leu Leu Ser Val Val Pro Pro Ser Gln Phe
 100 105 110
 Asn Phe Ala His Ser Gly Phe Gln Leu Glu Asp Ile Ser Thr Ser Gln
 115 120 125
 Arg Phe Met Leu Gly Phe Ala Gly Arg Arg Thr Ser Lys Pro Ala Met
 130 135 140
 Ala Gly His Tyr Leu Leu Asn Ile Ser Thr Tyr Gly Arg Gly Ser Glu
 145 150 155 160
 Ser Phe Arg Arg Thr His Ser Val Asn Pro Glu Asp Arg Phe Cys Leu
 165 170 175
 Ser Ser Pro Thr Glu Ala Leu Lys Met Gly Tyr Thr Asn Cys Lys Asn
 180 185 190

<210> 3453

<211> 477

<212> DNA

<213> Homo sapiens

<400> 3453

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 477

<210> 3454

<211> 159

<212> PRT

<213> Homo sapiens

<400> 3454

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 Pro Val Ala Gln Gly Leu Lys Glu Ala Leu Val Asp Thr Leu Thr Gly
 35 40 45
 Ile Leu Ser Pro Val Gln Glu Val Arg Ala Ala Ala Glu Glu Gln Ile
 50 55 60
 Lys Val Leu Glu Val Thr Glu Glu Phe Gly Val His Leu Ala Glu Leu
 65 70 75 80
 Thr Val Asp Pro Gln Gly Ala Leu Ala Ile Arg Gln Leu Ala Ser Val
 85 90 95
 Ile Leu Lys Gln Tyr Val Glu Thr His Trp Cys Ala Gln Ser Glu Lys
 100 105 110
 Phe Arg Pro Pro Glu Thr Thr Glu Arg Ala Lys Ile Val Ile Arg Glu
 115 120 125
 Leu Leu Pro Asn Gly Leu Arg Glu Ser Ile Ser Lys Val Arg Ser Ser
 130 135 140
 Val Ala Tyr Ala Val Ser Ala Ile Ala His Trp Asp Trp Pro Glu
 145 150 155

<210> 3455

<211> 4886

<212> DNA

<213> Homo sapiens

<400> 3455

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<210> 3456

<211> 117

<212> PRT

<213> Homo sapiens

<400> 3456

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Lys	Lys	Gln	Arg	Arg	Gly	Arg	Lys	Glu	Gly	Glu	Glu	Asp	Gln	Asn	
		20					25					30			
Pro	Pro	Cys	Pro	Arg	Leu	Asn	Gly	Val	Leu	Met	Glu	Val	Glu	Glu	Pro
		35					40					45			
Glu	Val	Leu	Gln	Asp	Ser	Leu	Asp	Arg	Cys	Tyr	Ser	Thr	Pro	Ser	Met
	50					55					60				
Tyr	Phe	Glu	Leu	Pro	Asp	Ser	Phe	Gln	His	Tyr	Arg	Ser	Val	Phe	Tyr
65					70					75				80	
Ser	Phe	Glu	Glu	Glu	His	Ile	Ser	Phe	Ala	Leu	Tyr	Val	Asp	Asn	Arg
			85						90					95	
Phe	Phe	Thr	Leu	Thr	Val	Thr	Ser	Leu	His	Leu	Val	Phe	Gln	Met	Gly
			100					105					110		
Val	Ile	Phe	Pro	Gln											

115

<210> 3457
 <211> 646
 <212> DNA
 <213> Homo sapiens

<400> 3457
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 420
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<210> 3458
 <211> 61
 <212> PRT
 <213> Homo sapiens

<400> 3458
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 20 25 30
 Ile Cys Ala Cys Leu Phe Thr His Arg Trp Glu Cys Arg Val Cys Ile
 35 40 45
 Leu Cys Xaa Cys Thr Cys Thr Gln Ala Xaa Ala Gly Lys
 50 55 60

<210> 3459
 <211> 592
 <212> DNA
 <213> Homo sapiens

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 180
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 240
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<210> 3460

<211> 115

<212> PRT

<213> Homo sapiens

<400> 3460

Met	Gly	Pro	Ser	Gly	Pro	Ala	Ala	Thr	Pro	Thr	Thr	Trp	Asp	Leu	Pro
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Ser	Gly	Pro	Ala	Arg	Ile	Pro	Val	Leu	Pro	Cys	Ser	Pro	Gln	Leu	Pro
			20					25					30		
Gly	Pro	Ser	Leu	Cys	Ala	Ala	Ser	Val	Cys	Leu	Leu	Gln	Asn	Lys	His
			35					40					45		
His	Ala	Pro	Ser	Trp	Ala	Glu	Ala	Pro	Ala	Asp	Ser	Pro	Arg	Ala	Leu
			50					55					60		
Gln	Ala	Cys	Pro	Val	Leu	Cys	Gln	Ala	Gly	Pro	Gly	His	Val	Pro	Ala
					70					75				80	
Pro	Gly	Ala	Gly	Leu	Gln	Arg	Gly	Gln	Trp	Ser	Ala	Leu	Lys	Thr	Val
				85					90					95	
Ile	Pro	Ala	Arg	Pro	Ala	Leu	Pro	Cys	Ser	Ala	Arg	Gly	Gln	Phe	Glu
				100				105						110	
Leu	Lys	Leu													
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<210> 3461

<211> 474

<212> DNA

<213> Homo sapiens

<400> 3461

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 120
 agctttgcgt ccgtggcaga tgtcagctcc agtcgcagcc gcacctccg gatggccctg
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 300
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 360
 acgttcgctc accaccgatc cattgtccag ctctatgtgg ctcccgcacc agagaagtc
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<210> 3462

<211> 101

<212> PRT

<213> Homo sapiens

<400> 3462

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Leu	Leu	Gly	Gly	His	Trp	Leu	Arg	Ala	Gln	Gly	Tyr	Ala	Asn	Pro	Phe
		20					25					30			
Trp	Leu	Ala	Leu	Ala	Leu	Leu	Ile	Ala	Met	Thr	Leu	Tyr	Ala	Ala	Phe
	35					40					45				
Cys	Phe	Gly	Glu	Thr	Leu	Lys	Glu	Pro	Lys	Ser	Thr	Arg	Leu	Phe	Thr
	50					55				60					
Phe	Arg	His	His	Arg	Ser	Ile	Val	Gln	Leu	Tyr	Val	Ala	Pro	Ala	Pro
65					70					75				80	
Glu	Lys	Ser	Arg	Lys	His	Leu	Ala	Leu	Tyr	Ser	Leu	Ala	Ile	Phe	Val
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Val	Ile	Thr	Val	His											
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<210> 3463

<211> 1734

<212> DNA

<213> Homo sapiens

<400> 3463

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<210> 3464

<211> 434

<212> PRT

<213> Homo sapiens

<400> 3464

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Leu	Glu	Asp	Pro	Ala	Val	Pro	Arg	Leu	Thr	Ala	Ala	Leu	Pro	Ala
			20					25				30		
Glu	Leu	Pro	Glu	Arg	Arg	Arg	Arg	Gln	Gln	Arg	Gln	Gly	Lys	His

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 50 55 60
 Lys Leu Ser Ile Lys Gly Leu Ile Glu Ser Ala Leu Asn Leu Gly Arg
 65 70 75 80
 Thr Leu Asp Ser Asp Tyr Ala Pro Leu Gln Gln Phe Phe Val Val Met
 85 90 95
 Glu His Cys Leu Lys His Gly Leu Lys Ala Lys Lys Thr Phe Leu Gly
 100 105 110
 Gln Asn Lys Ser Phe Trp Gly Pro Leu Glu Leu Val Glu Lys Leu Val
 115 120 125
 Pro Glu Ala Ala Glu Ile Thr Ala Ser Val Lys Asp Leu Pro Gly Leu
 130 135 140
 Lys Thr Pro Val Gly Arg Gly Arg Ala Trp Leu Arg Leu Ala Leu Met
 145 150 155 160
 Gln Lys Lys Leu Ser Glu Tyr Met Lys Ala Leu Ile Asn Lys Lys Glu
 165 170 175
 Leu Leu Ser Glu Phe Tyr Glu Pro Asn Ala Leu Met Met Glu Glu Glu
 180 185 190
 Gly Ala Ile Ile Ala Gly Leu Leu Val Gly Leu Asn Val Ile Asp Ala
 195 200 205
 Asn Phe Cys Met Lys Gly Glu Asp Leu Asp Ser Gln Val Gly Val Ile
 210 215 220
 Asp Phe Ser Met Tyr Leu Lys Asp Gly Asn Ser Ser Lys Gly Thr Glu
 225 230 235 240
 Gly Asp Gly Gln Ile Thr Ala Ile Leu Asp Gln Lys Asn Tyr Val Glu
 245 250 255
 Glu Leu Asn Arg His Leu Asn Ala Thr Val Asn Asn Leu Gln Ala Lys
 260 265 270
 Val Asp Ala Leu Glu Lys Ser Asn Thr Lys Leu Thr Glu Glu Leu Ala
 275 280 285
 Val Ala Asn Asn Arg Ile Ile Thr Leu Gln Glu Glu Met Glu Arg Val
 290 295 300
 Lys Glu Glu Ser Ser Tyr Ile Leu Glu Ser Asn Arg Lys Gly Pro Lys
 305 310 315 320
 Gln Asp Arg Thr Ala Glu Gly Gln Ala Leu Ser Glu Ala Arg Lys His
 325 330 335
 Leu Lys Glu Glu Thr Gln Leu Arg Leu Asp Val Glu Lys Glu Leu Glu
 340 345 350
 Met Gln Ile Ser Met Arg Gln Glu Met Glu Leu Ala Met Lys Met Leu
 355 360 365
 Glu Lys Asp Val Cys Glu Lys Gln Asp Ala Leu Val Ser Leu Arg Gln
 370 375 380
 Gln Leu Asp Asp Leu Arg Ala Leu Lys His Glu Leu Ala Phe Lys Leu
 385 390 395 400
 Gln Ser Ser Asp Leu Gly Val Lys Gln Lys Ser Glu Leu Asn Ser Arg
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<210> 3465

<211> 2904

<212> DNA

<213> Homo sapiens

<400> 3465

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<210> 3466

<211> 315

<212> PRT

<213> Homo sapiens

<400> 3466

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 Leu Leu Glu Gly Met Leu Phe Ser Leu Lys Tyr Leu Gly Met Thr Leu
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 Val Glu Gln Pro Lys Gly Glu Glu Leu Ser Ala Ala Ala Ile Lys Arg
 65 70 75 80
 Ile Val Ala Thr Ala Lys Ala Ser Gly Lys Lys Leu Gln Lys Val Thr
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 Leu Lys Val Ser Pro Arg Gly Ile Ile Leu Thr Asp Asn Leu Thr Asn
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 Gln Leu Ile Glu Asn Val Ser Ile Tyr Arg Ile Ser Tyr Cys Thr Ala
 115 120 125
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 Ala Gln Ala Val Thr Leu Thr Val Ala Gln Ala Phe Lys Val Ala Phe
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 Glu Phe Trp Gln Val Ser Lys Glu Glu Lys Glu Lys Arg Asp Lys Ala
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 Ser Gln Glu Gly Gly Asp Val Leu Gly Ala Arg Gln Asp Cys Thr Pro
 195 200 205
 Pro Leu Lys Ser Leu Val Ala Thr Gly Asn Leu Leu Asp Leu Glu Glu
 210 215 220
 Thr Ala Lys Ala Pro Leu Ser Thr Val Ser Ala Asn Thr Thr Asn Met
 225 230 235 240
 Asp Glu Val Pro Arg Pro Gln Ala Leu Ser Gly Ser Ser Val Val Trp
 245 250 255
 Glu Leu Asp Asp Gly Leu Asp Glu Ala Phe Ser Arg Leu Ala Gln Ser
 260 265 270
 Arg Thr Asn Pro Gln Val Leu Asp Thr Gly Leu Thr Ala Gln Asp Met
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 His Tyr Ala Gln Cys Leu Ser Pro Val Asp Trp Asp Lys Pro Asp Ser
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 Ser Gly Thr Glu Gln Asp Asp Leu Phe Ser Phe
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<210> 3467

<211> 638

<212> DNA

<213> Homo sapiens

<400> 3467

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 ggtctgaggt gaaggtccta ggagcatcag ttctctgttg ggatcaaggt tgctgggaca
 180

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<210> 3468

<211> 88

<212> PRT

<213> Homo sapiens

<400> 3468

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Tyr	Asp	Phe	Pro	Pro	Leu	Cys	Met	Ser	Gly	Leu	His	Asp	Phe	Gln	Phe
			20					25					30		
Trp	Leu	Cys	Tyr	Thr	Ser	Cys	Tyr	Gln	Gln	Asn	Arg	Val	Ser	Leu	Gly
		35				40						45			
Gln	Ser	Cys	Gly	Tyr	Thr	Ser	Val	Ser	Gln	Asp	Phe	Leu	Cys	Gln	Arg
	50					55				60					
Ala	Val	Lys	Leu	Arg	Thr	Lys	Val	Ile	Lys	Ile	Gln	Leu	Tyr	Tyr	Trp
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<210> 3469

<211> 1710

<212> DNA

<213> Homo sapiens

<400> 3469

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<210> 3470

<211> 322

<212> PRT

<213> Homo sapiens

<400> 3470

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Pro Asp Glu Asp Leu Ser His Arg Asn Lys Glu Pro Pro Ala Pro Ala			
35	40	45	
Gln Gln Leu Gln Pro Gln Pro Val Ala Val Gln Gly Pro Glu Pro Ala			
50	55	60	
Arg Val Glu Lys Ile Phe Thr Pro Ala Ala Pro Val His Thr Asn Lys			
65	70	75	80
Glu Asp Pro Ala Thr Gln Thr Asn Leu Gly Phe Ile His Ala Phe Val			
85	90	95	
Ala Ala Ile Ser Val Ile Ile Val Ser Glu Leu Gly Asp Lys Thr Phe			
100	105	110	
Phe Ile Ala Ala Ile Met Ala Met Arg Tyr Asn Arg Leu Thr Val Leu			
115	120	125	
Ala Gly Ala Met Leu Ala Leu Gly Leu Met Thr Cys Leu Ser Val Leu			
130	135	140	
Phe Gly Tyr Ala Thr Thr Val Ile Pro Arg Val Tyr Thr Tyr Tyr Val			
145	150	155	160
Ser Thr Val Leu Phe Ala Ile Phe Gly Ile Arg Met Leu Arg Glu Gly			
165	170	175	
Leu Lys Met Ser Pro Asp Glu Gly Gln Glu Glu Leu Glu Glu Val Gln			
180	185	190	
Ala Glu Leu Lys Lys Lys Asp Glu Glu Phe Gln Arg Thr Lys Leu Leu			
195	200	205	
Asn Gly Pro Gly Asp Val Glu Thr Gly Thr Ser Ile Thr Val Pro Gln			
210	215	220	
Lys Lys Trp Leu His Phe Ile Ser Pro Ile Phe Val Gln Ala Leu Thr			
225	230	235	240
Leu Thr Phe Leu Ala Glu Trp Gly Asp Arg Ser Gln Leu Thr Thr Ile			
245	250	255	
Val Leu Ala Ala Arg Glu Asp Pro Tyr Gly Val Ala Val Gly Gly Thr			
260	265	270	
Val Gly His Cys Leu Cys Thr Gly Leu Ala Val Ile Gly Gly Arg Met			
275	280	285	
Ile Ala Gln Lys Ile Ser Val Arg Thr Val Thr Ile Ile Gly Gly Ile			
290	295	300	
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305	310	315	320
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<210> 3471

<211> 2335

<212> DNA

<213> Homo sapiens

<400> 3471

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180

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<210> 3472

<211> 631

<212> PRT

<213> Homo sapiens

<400> 3472

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			20				25					30			
Lys	Val	Cys	Val	Ser	Val	Val	Ser	Glu	Lys	Cys	Arg	Ile	Asp	Thr	Glu
		35				40						45			
Ile	Leu	Pro	Ser	Leu	Phe	Met	Arg	Cys	Thr	Thr	Asp	Leu	Asn	Arg	Lys
	50					55					60				
Asp	Lys	Phe	Pro	Ala	Ile	Thr	His	Leu	Lys	Phe	Leu	Ala	Arg	Asp	Met
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Ser	Glu	Gln	Val	Leu	Cys	Ala	Ser	Ser	Gln	Thr	Ser	Ser	Ile	Val	
			85				90						95		
Glu	Cys	Trp	Ser	Leu	Arg	Lys	Glu	Gly	Leu	Pro	Val	Asn	Asn	Ile	Phe
			100				105						110		
Gln	Gln	Ile	Ser	Pro	Val	Val	Gly	Asp	Lys	Gln	Pro	Thr	Ile	Leu	Lys
		115					120					125			
Trp	Arg	Ile	Leu	Ser	Ala	Thr	Asn	Asp	Leu	Asp	Arg	Val	Ser	Ala	Val
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Ala	Leu	Pro	Lys	Leu	Pro	Ile	Ser	Leu	Thr	Asn	Thr	Asp	Leu	Lys	Val
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His	Asp	Gly	Ser	Val	His	Ile	Val	His	Arg	Leu	Ser	Leu	Gln	Thr	Met
			180					185					190		
Ala	Val	Phe	Tyr	Ser	Ser	Ala	Ala	Pro	Arg	Pro	Val	Asp	Glu	Pro	Ala
	195					200						205			
Met	Lys	Arg	Pro	Arg	Thr	Ala	Gly	Pro	Ala	Val	His	Leu	Lys	Ala	Met
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<210>	3473
<211>	1660

<212> DNA

<213> Homo sapiens

<400> 3473

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<210> 3474

<211> 474

<212> PRT

<213> Homo sapiens

<400> 3474

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		20					25					30			
Lys	Cys	Tyr	Glu	Ser	Ser	Cys	Cys	Gln	Ser	Ser	Glu	Asp	Glu	Val	Glu
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Ile	Leu	Gly	Pro	Phe	Pro	Ala	Gln	Thr	Pro	Pro	Trp	Leu	Met	Ala	Ser
	50					55					60				
Arg	Ser	Ser	Asp	Lys	Asp	Gly	Asp	Ser	Val	His	Thr	Ala	Ser	Glu	Val
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Pro	Leu	Thr	Pro	Arg	Thr	Asn	Ser	Pro	Asp	Gly	Arg	Arg	Ser	Ser	Ser
			85					90					95		
Asp	Thr	Ser	Lys	Ser	Thr	Tyr	Ser	Leu	Thr	Arg	Arg	Ile	Ser	Ser	Leu
			100					105					110		
Glu	Ser	Arg	Arg	Pro	Ser	Ser	Pro	Leu	Ile	Asp	Ile	Lys	Pro	Ile	Glu
		115				120					125				
Phe	Gly	Val	Leu	Ser	Ala	Lys	Lys	Glu	Pro	Ile	Gln	Pro	Ser	Val	Leu
	130					135					140				
Arg	Arg	Thr	Tyr	Asn	Pro	Asp	Asp	Tyr	Phe	Arg	Lys	Phe	Glu	Pro	His
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Leu	Tyr	Ser	Leu	Asp	Ser	Asn	Ser	Asp	Asp	Val	Asp	Ser	Leu	Thr	Asp
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Glu	Glu	Ile	Leu	Ser	Lys	Tyr	Gln	Leu	Gly	Met	Leu	His	Phe	Ser	Thr
		180					185					190			
Gln	Tyr	Asp	Leu	Leu	His	Asn	His	Leu	Thr	Val	Arg	Val	Ile	Glu	Ala
	195					200					205				
Arg	Asp	Leu	Pro	Pro	Pro	Ile	Ser	His	Asp	Gly	Ser	Arg	Gln	Asp	Met
210					215					220					
Ala	His	Ser	Asn	Pro	Tyr	Val	Lys	Ile	Cys	Leu	Leu	Pro	Asp	Gln	Lys
225			230					235						240	
Asn	Ser	Lys	Gln	Thr	Gly	Val	Lys	Arg	Lys	Thr	Gln	Lys	Pro	Val	Phe
			245					250					255		
Glu	Glu	Arg	Tyr	Thr	Phe	Glu	Ile	Pro	Phe	Leu	Glu	Ala	Gln	Arg	Arg
		260					265					270			
Thr	Leu	Leu	Leu	Thr	Val	Val	Asp	Phe	Asp	Lys	Phe	Ser	Arg	His	Cys
	275					280					285				
Val	Ile	Gly	Lys	Val	Ser	Val	Pro	Leu	Cys	Glu	Val	Asp	Leu	Val	Lys
	290					295				300					
Gly	Gly	His	Trp	Trp	Lys	Ala	Leu	Ile	Pro	Ser	Gln	Asn	Glu	Val	
305					310				315				320		
Glu	Leu	Gly	Glu	Leu	Leu	Leu	Ser	Leu	Asn	Tyr	Leu	Pro	Ser	Ala	Gly

325 330 335
 Arg Leu Asn Val Asp Val Ile Arg Ala Lys Gln Leu Leu Gln Thr Asp
 340 345 350
 Val Ser Gln Gly Ser Asp Pro Phe Val Lys Ile Gln Leu Val His Gly
 355 360 365
 Leu Lys Leu Val Lys Thr Lys Lys Thr Ser Phe Leu Arg Gly Thr Ile
 370 375 380
 Asp Pro Phe Tyr Asn Glu Ser Phe Ser Phe Lys Val Pro Gln Glu Glu
 385 390 395 400
 Leu Glu Asn Ala Ser Leu Val Phe Thr Val Phe Gly His Asn Met Lys
 405 410 415
 Ser Ser Asn Asp Phe Ile Gly Arg Ile Val Ile Gly Gln Tyr Ser Ser
 420 425 430
 Gly Pro Ser Glu Thr Asn His Trp Arg Arg Met Leu Asn Thr His Arg
 435 440 445
 Thr Ala Val Glu Gln Trp His Ser Leu Arg Ser Arg Ala Glu Cys Asp
 450 455 460
 Arg Val Ser Pro Ala Ser Leu Glu Val Thr
 465 470

<210> 3475

<211> 514

<212> DNA

<213> Homo sapiens

<400> 3475

acgcgtctcg agggctgggt cttctgcacg cccgcccgcga agctgctctg gctgggtgctg
 60
 cagcccttct tctactcact acggcgcgtc tgcgtccacc ccaaggccgt gaccgcgatg
 120
 gaggtgctca acacgtgggt gcagctggcg gccgacctgg ccattcttgc cctttggggg
 180
 ctcaagcccg tgggtctacct gctggccagc tcttctctgg gctggggcct gcaccccatc
 240
 tcgggccact tcgtggccga gcactacatg ttcctcaagg gccacgagac ctactctac
 300
 tatgggctc tcaactggat caccttcaat gtgggctacc acgtggagca ccacgacttc
 360
 ccagcatcc cgggtacaa cctgcgcgtg gtgcggaaga tcgcgcccga gtactacgac
 420
 cacctgcgc agcaccactc ctgggtgaag gtgctctggg attttgtgtt tgaggactcc
 480
 ctggggccct atgccagggt gaagcgggtg taca
 514

<210> 3476

<211> 171

<212> PRT

<213> Homo sapiens

<400> 3476

Thr Arg Leu Glu Gly Trp Phe Phe Cys Thr Pro Ala Arg Lys Leu Leu
 1 5 10 15
 Trp Leu Val Leu Gln Pro Phe Phe Tyr Ser Leu Arg Pro Leu Cys Val


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                20                25                30
His Pro Lys Ala Val Thr Arg Met Glu Val Leu Asn Thr Leu Val Gln
                35                40                45
Leu Ala Ala Asp Leu Ala Ile Phe Ala Leu Trp Gly Leu Lys Pro Val
                50                55                60
Val Tyr Leu Leu Ala Ser Ser Phe Leu Gly Leu Gly Leu His Pro Ile
        65                70                75                80
Ser Gly His Phe Val Ala Glu His Tyr Met Phe Leu Lys Gly His Glu
                85                90                95
Thr Tyr Ser Tyr Tyr Gly Pro Leu Asn Trp Ile Thr Phe Asn Val Gly
                100                105                110
Tyr His Val Glu His His Asp Phe Pro Ser Ile Pro Gly Tyr Asn Leu
                115                120                125
Pro Leu Val Arg Lys Ile Ala Pro Glu Tyr Tyr Asp His Leu Pro Gln
                130                135                140
His His Ser Trp Val Lys Val Leu Trp Asp Phe Val Phe Glu Asp Ser
        145                150                155                160
Leu Gly Pro Tyr Ala Arg Val Lys Arg Val Tyr
                165                170

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<210> 3477

<211> 356

<212> DNA

<213> Homo sapiens

<400> 3477

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gcgcgcctcg gctgcctgcc cggcggtctc cgggtcctcg tccagaccgg ccaccggagc
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ttgacctctt gcacgcaccc ttccatggga cttaatgaag agcagaaaga atttcaaaaa
120
gtggcctttg actttgctgc ccgagagatg gtcctcaaata tggcagagtg ggaccagaag
180
gtaggcgttt ttcttgctgt tagacgttct aacaacagat gtctcaggca gacctttatc
240
tttgtctccc gataatgtaa ttgttaaatag tctctccac ttaccaactc ttactgcaag
300
tgagaatacc ggtagtggat gatttttctt agaaggcatc ctgatcatct tgtaca
356

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<210> 3478

<211> 116

<212> PRT

<213> Homo sapiens

<400> 3478

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Met Ile Arg Met Pro Ser Arg Lys Asn His Pro Leu Pro Val Phe Ser
1                5                10                15
Leu Ala Val Arg Val Gly Lys Trp Arg Arg His Leu Thr Ile Thr Leu
                20                25                30
Ser Gly Asp Lys Asp Lys Gly Leu Pro Glu Thr Ser Val Val Arg Thr
                35                40                45
Ser Lys His Lys Lys Asn Ala Tyr Leu Leu Val Pro Leu Cys His Ile
                50                55                60
Trp Ser His Leu Ser Gly Ser Lys Val Lys Gly His Phe Leu Lys Phe

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<400> 3480
Xaa Phe Gln Pro Ser Leu Lys Gly Lys Ala Thr Ser Glu Asp Thr Leu
1 5 10 15
Asn Leu Arg Arg Tyr Pro Gly Ser Asp Arg Ile Met Leu Gln Lys Trp
20 25 30
Gln Lys Arg Asp Ile Ser Asn Phe Glu Tyr Leu Met Tyr Leu Asn Thr

35	40	45																	
Ala	Ala	Gly	Arg	Thr	Cys	Asn	Asp	Tyr	Met	Gln	Tyr	Pro	Val	Phe	Pro				
50						55					60								
Trp	Val	Leu	Ala	Asp	Tyr	Thr	Ser	Glu	Thr	Leu	Asn	Leu	Ala	Asn	Pro				
65						70				75					80				
Lys	Ile	Phe	Arg	Asp	Leu	Ser	Lys	Pro	Met	Gly	Ala	Gln	Thr	Lys	Glu				
						85				90					95				
Arg	Lys	Leu	Lys	Phe	Ile	Gln	Arg	Phe	Lys	Glu	Val	Glu	Lys	Thr	Glu				
						100				105					110				
Gly	Asp	Met	Thr	Ala	Gln	Cys	His	Tyr	Tyr	Thr	His	Tyr	Ser	Ser	Ala				
						115				120					125				
Ile	Ile	Val	Ala	Ser	Tyr	Leu	Val	Arg	Met	Pro	Pro	Phe	Thr	Gln	Ala				
						130				135					140				
Phe	Cys	Ala	Leu	Gln	Val	Ser	Cys	Cys	His	Ser	Leu	Tyr	Thr	His	Thr				
145						150				155					160				
His	Thr	His	Thr	His	Thr	Tyr	Ala	Cys	Ile	Thr	Arg	Leu	Arg	Pro	Val				
						165				170					175				
Leu	Glu	Gln	Arg	Gln	Asp	Ala	Ser	Ala	Lys	Asn	Leu	Val	Ile	Ser	Gln				
						180				185					190				

<210> 3481

<211> 1794

<212> DNA

<213> Homo sapiens

<400> 3481

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nncaacgtgg tcaccacctc acgaactata agaagcgtgt ggcagccttg gaagccacgc
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aaaagcccag cacttcccag agccagggac tgacacaaca gaaagtctgc aagcaatgcc
120
atgaggtcct gaccagaggg tcttctgcc atgcctcaa gtggcacca cctcagctct
180
gcagaccctg cgggtgctggg agccaccatg gagagtaggt gctacggctg cgctgtcaag
240
ttcacctct tcaagaagga gtacggctgt aagaattgtg gcaggngctt ctgttcaggc
300
tgccaaagct tcagtgcagc agtgccctcg actgggaaca cccaacagaa agtctgcaag
360
caatgccatg aggtcctgac cagagggctt tctgccaatg cctccaagtg gtcaccacct
420
cagaactata agaagcgtgt ggcagccttg gaagccaagc aaaagcccag cacttcccag
480
agccagggac tgacacgaca agaccagatg attgctgagc gcctagcacg actccgccag
540
gagaacaagc ccaagttagt cccctcacag gcagagatag aggcacggct ggctgcccta
600
aaggatgaac gtcaggggtc catcccttc acccaggaaa tggaggcacg acttgacagc
660
ttgcagggca gagttctacc ttctcaaacc cccagcccg gcacatcaca caccggacac
720
caggacccaa gccacgaga cacaggatct gctaacgcag ctggcagctg aggtggctat
780
cgatgaaagc tggaaaggag gagggcccag tgccctcttc cagaatgatc tcaaccaggg
840

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tggcccaggg agcactaatt ccaagaggca ggccacttgg ttcttggaga aggagaagag
 900
 cagactgctg gctgaggcag cacttgagtt gcgggaggag aacacgaggc aggaacggat
 960
 tctggccctg gccaaagcag tagccatgct gcggggacag gaccccgaga gactgaccct
 1020
 ccaggactat cgctcccag acagtgatga cgacgaggat gaggagacag ccatccaaag
 1080
 agtcctgcag cagctcactg aagaagcttc cctggatgag gcaagtggct ttaacatccc
 1140
 tgcagagcag gcttctcgac cctggacgca, accccgcggg gcagagcctg aggccaggag
 1200
 tgtggacccc aggcctgagg ctgaggaaga ggagctcccc tggtgctgca tctgcaatga
 1260
 ggatgccacc ctacgctgag ctggctgca tggggacctc ttctgtgccc gctgcttccg
 1320
 agagggccat gatgcctttg agcttaaaga gcaccagaca tctgcctact ctctccacg
 1380
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 1440
 ggcacccatt tctgggcccc gccacaggac gtccgatggg agagcttgct tggctctact
 1500
 gatgatggat aggcctctc ctgagccttg gtgtccctgg aatgaggaaa gattctccat
 1560
 tcgagagaat gactgggagg gaagaagtcg gggccctcct attagaagcc cagactggaa
 1620
 gtgagaggca tgatggggag agaccagact gaatctacgg gtgagccctg taacctggct
 1680
 ctagggcaca ggccccctcc ctggcactta gtgggtctaa taaagtatgt tgattcattg
 1740
 ggaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa
 1794

<210> 3482

<211> 206

<212> PRT

<213> Homo sapiens

<400> 3482

Met	Pro	Pro	Ser	Gly	His	His	Leu	Ser	Ser	Ala	Asp	Pro	Ala	Val	Leu
1				5				10						15	
Gly	Ala	Thr	Met	Glu	Ser	Arg	Cys	Tyr	Gly	Cys	Ala	Val	Lys	Phe	Thr
			20					25					30		
Leu	Phe	Lys	Lys	Glu	Tyr	Gly	Cys	Lys	Asn	Cys	Gly	Arg	Xaa	Phe	Cys
		35					40					45			
Ser	Gly	Cys	Leu	Ser	Phe	Ser	Ala	Ala	Val	Pro	Arg	Thr	Gly	Asn	Thr
		50					55				60				
Gln	Gln	Lys	Val	Cys	Lys	Gln	Cys	His	Glu	Val	Leu	Thr	Arg	Gly	Ser
					70					75				80	
Ser	Ala	Asn	Ala	Ser	Lys	Trp	Ser	Pro	Pro	Gln	Asn	Tyr	Lys	Lys	Arg
					85					90				95	
Val	Ala	Ala	Leu	Glu	Ala	Lys	Gln	Lys	Pro	Ser	Thr	Ser	Gln	Ser	Gln
			100					105					110		
Gly	Leu	Thr	Arg	Gln	Asp	Gln	Met	Ile	Ala	Glu	Arg	Leu	Ala	Arg	Leu

115 120 125
 Arg Gln Glu Asn Lys Pro Lys Leu Val Pro Ser Gln Ala Glu Ile Glu
 130 135 140
 Ala Arg Leu Ala Ala Leu Lys Asp Glu Arg Gln Gly Ser Ile Pro Ser
 145 150 155 160
 Thr Gln Glu Met Glu Ala Arg Leu Ala Ala Leu Gln Gly Arg Val Leu
 165 170 175
 Pro Ser Gln Thr Pro Gln Pro Gly Thr Ser His Thr Gly His Gln Asp
 180 185 190
 Pro Ser Pro Ala Asp Thr Gly Ser Ala Asn Ala Ala Gly Ser
 195 200 205

<210> 3483

<211> 477

<212> DNA

<213> Homo sapiens

<400> 3483

ncggccgcgg cgcggaacgg cgccctcccg cccaccatgg gcaacagcgc gagccgcaac
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 gacttcgagt gggctctacac cgaccagccg cacacgcagc ggcgcaagga gatactggcc
 120
 aagtaccggg ccatacaggc cctgatgcgg ccagaccggc gcctcaagtg ggcggggctg
 180
 gtgctgggtgc tgggtcagat gctggcctgc tggctgggtgc gggggctggc ctggcgctgg
 240
 ctgctgttct gggcctacgc ctttggtggc tgcgtgaacc actcgctgac gctggccatc
 300
 cagcacatct cgcacaacgc ggccttcggc acggggcgtg cggcacgcaa ccgctggctg
 360
 gccgtgttcg ccaacctgcc cgtgggtgtg ccctacgcgg cctccttcaa gaagtaccac
 420
 gtggaccacc accgctacct gggcgggcgac ggactggacg tggacgtgcc cacgcgt
 477

<210> 3484

<211> 147

<212> PRT

<213> Homo sapiens

<400> 3484

Met Gly Asn Ser Ala Ser Arg Asn Asp Phe Glu Trp Val Tyr Thr Asp
 1 5 10 15
 Gln Pro His Thr Gln Arg Arg Lys Glu Ile Leu Ala Lys Tyr Pro Ala
 20 25 30
 Ile Lys Ala Leu Met Arg Pro Asp Pro Arg Leu Lys Trp Ala Gly Leu
 35 40 45
 Val Leu Val Leu Val Gln Met Leu Ala Cys Trp Leu Val Arg Gly Leu
 50 55 60
 Ala Trp Arg Trp Leu Leu Phe Trp Ala Tyr Ala Phe Gly Gly Cys Val
 65 70 75 80
 Asn His Ser Leu Thr Leu Ala Ile His Asp Ile Ser His Asn Ala Ala
 85 90 95
 Phe Gly Thr Gly Arg Ala Ala Arg Asn Arg Trp Leu Ala Val Phe Ala

	100		105		110										
Asn	Leu	Pro	Val	Gly	Val	Pro	Tyr	Ala	Ala	Ser	Phe	Lys	Lys	Tyr	His
	115					120					125				
Val	Asp	His	His	Arg	Tyr	Leu	Gly	Gly	Asp	Gly	Leu	Asp	Val	Asp	Val
	130					135					140				
Pro	Thr	Arg													
145															

<210> 3485

<211> 812

<212> DNA

<213> Homo sapiens

<400> 3485

tatttatttta tagtcacaaa aactgttcag gaagaaatgt tatgaaaaga acattttttac
60
tgcattgctta aaacatttaa ttttctatta tacagttaaa catttgcttg aattcagtga
120
gtctaaaaaa tcttattggt ctcaggttag cagttagtgt agcagagtcc attggtgaag
180
caatctagtt attggcaaat tctaacacat ggtaaggtgt gggggaaagg atttaaaata
240
acagaaaaat gtaagtacaa acatacataa cagcaaaata aaactcactt taacaaaaat
300
ttatttaaaa tgttaccccc atatttcctc aatgaccaac ttgtttcagt tttatctccc
360
cctcatccgg ttattttatg tctttttggg aggaagggag atgaggggtt ttgtttttta
420
acaaaatcac tggcttttta aaaagtgtta ctgcagtcac ttataagatg catgttatgt
480
ggaagtgata cctgagttgt ttgcatgggc aatggaagag gcagcagctc tgaaaggagt
540
atgagtcag aaaaaaatcc ttcaggaacc ttcaagattg aagaaagaac ttcttttaac
600
attaaagacc aagtattatt ggccagagtc tcttctgaga ttgtgagttt ttcattaact
660
ccttggtgtaa aagtcagtaa aatatcaatg atatcattct gaattttctg ttcattacta
720
tccaaacgac ctgagagggg gatagagcac aggagcatat gtaaagtaac aagcgctgaa
780
ggaacacgca tgtccttaaa ctcaaaggat cc
812

<210> 3486

<211> 117

<212> PRT

<213> Homo sapiens

<400> 3486

Met	Arg	Val	Pro	Ser	Ala	Leu	Val	Thr	Leu	His	Met	Leu	Leu	Cys	Ser
1			5			10			15						
Ile	Pro	Leu	Ser	Gly	Arg	Leu	Asp	Ser	Asp	Glu	Gln	Lys	Ile	Gln	Asn
		20				25				30					
Asp	Ile	Ile	Asp	Ile	Leu	Leu	Thr	Phe	Thr	Gln	Gly	Val	Asn	Glu	Lys

35	40	45
Leu Thr Ile Ser Glu Glu Thr Leu Ala Asn Asn Thr Trp Ser Leu Met		
50	55	60
Leu Lys Glu Val Leu Ser Ser Ile Leu Lys Val Pro Glu Gly Phe Phe		
65	70	75
Ser Gly Leu Ile Leu Leu Ser Glu Leu Leu Pro Leu Pro Leu Pro Met		
85	90	95
Gln Thr Thr Gln Val Ser Leu Pro His Asn Met His Leu Ile Asn Asp		
100	105	110
Cys Ser Asn Thr Phe		
115		

<210> 3487

<211> 772

<212> DNA

<213> Homo sapiens

<400> 3487

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nnattgtatc aaaatcctag atttgaataa cttattattt taaataatca gtaactaaaa
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ccaagcaatc catcacacaa agaggggaaa gggtaatat ctgagttata aattttttac
120
cctgtctgat aaaaatagaa gcctgaaagt ttaaattttt cctggattta aatttaaaga
180
taaatttggt tttcagttaa atattcctca tagcaatttt accaaagagg cttcttctg
240
aaggccacct ctgaaataat tagaggataa atgtcaatgg catgatatta agatattact
300
tggccaggcg tggctgtcac gcgtgtaatc ccagcacttt gggaggccga ggcagggtgga
360
tcacgaggtc aagaaatcga gaccagcctg gctaacacag tgaaaccccg tctcattctg
420
agctttctga caccttttaa tccagtcact gaaattagca tctgcaccta gaaagaaaaa
480
actgactata acatcactca tctgcacaac ctattaatca gcaaatactt actgaatacc
540
tactacatcc caggcagtgt tctaggcact ggggagtcgg cagcgaacaa aacctgtctt
600
aacagacctt atcaccaact ctactatagt tataaacata ccaatagttt aacatttagt
660
tgtaatcat gaaacatttt gatTTTTTaa aaattTTTaa tacagtcaac cttaatttca
720
cagatacaaa taatctgcat ttcccccaat cccgctgctc ttagagaagc tt
772

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<210> 3488

<211> 59

<212> PRT

<213> Homo sapiens

<400> 3488

Asp Ile Thr Trp Pro Gly Val Val Val Thr Arg Val Ile Pro Ala Leu
1 5 10 15
Trp Glu Ala Glu Ala Gly Gly Ser Arg Gly Gln Glu Ile Glu Thr Ser

20 25 30
 Leu Ala Asn Thr Val Lys Pro Arg Leu Ile Leu Ser Phe Leu Thr Pro
 35 40 45
 Phe Asn Pro Val Thr Glu Ile Ser Ile Cys Thr
 50 55

<210> 3489

<211> 288

<212> DNA

<213> Homo sapiens

<400> 3489

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 60
 agggagacca ggtctggccc ccaactctaa ggctcatctt agaggcgaga ttcaggccca
 120
 gcccgagggtg ccccatgagg cctgggtggtt ggaggcagag ggtatccctt gcccaaattc
 180
 gtgccacatt cacagtcact gggaaagcta cggggatggg ccgggcgcgg tggctcacac
 240
 ctgtaatccc agcactttgg agagccccaa gacgacggat cacgagtc
 288

<210> 3490

<211> 90

<212> PRT

<213> Homo sapiens

<400> 3490

Met Gly Ala His Leu Leu Pro Gly Pro Gly Arg Pro Gly Arg Pro Gly
 1 5 10 15
 Arg Pro Gly Leu Ala Pro Asn Ser Lys Ala His Leu Arg Gly Glu Ile
 20 25 30
 Gln Ala Gln Pro Arg Val Pro His Glu Ala Trp Trp Leu Glu Ala Glu
 35 40 45
 Gly Ile Pro Cys Pro Asn Ser Cys His Ile His Ser His Trp Glu Ser
 50 55 60
 Tyr Gly Asp Gly Pro Gly Ala Val Ala His Thr Cys Asn Pro Ser Thr
 65 70 75 80
 Leu Glu Ser Pro Lys Thr Thr Asp His Glu
 85 90

<210> 3491

<211> 568

<212> DNA

<213> Homo sapiens

<400> 3491

gggaaccgac gtccctctgt ggtgaaattc cacccttca cgccgtgcat cgccgtagcc
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 gacaaggaca gcatctgctt ttgggactgg gagaaagggg agaagctgga ttatttccac
 120
 aatgggaacc ctcggtacac gagggtcact gccatggagt atctgaatgg ccaggactgc
 180

tgcgttctgc tgacggccac agacgatggt gccatcaggg tctggaagaa ttttgetgat
240
ttggaaaaga acccagagat ggtgaccgcg tggcaggggc tctcggacat gctgccaacg
300
acgcgaggag ctgggatggt ggtggactgg gagcaggaga ccggcctcct catgagctca
360
ggagacgtgc ggatcgctcg gatctgggac acagaccgtg agatgaaggt gcaggacatc
420
cctacgggcg cagacagctg tgtgacgagt ctgtcctgtg attcccaccg ctcaactcatc
480
gtggctggcc tcgggtgacgg ctccatccgc gtctacgaca gaaggatggc actcagcgaa
540
tgcccgctca tgacgtaccg ggagcaca
568

<210> 3492

<211> 189

<212> PRT

<213> Homo sapiens

<400> 3492

Gly	Asn	Arg	Arg	Pro	Ser	Val	Val	Lys	Phe	His	Pro	Phe	Thr	Pro	Cys
1				5				10						15	
Ile	Ala	Val	Ala	Asp	Lys	Asp	Ser	Ile	Cys	Phe	Trp	Asp	Trp	Glu	Lys
		20					25					30			
Gly	Glu	Lys	Leu	Asp	Tyr	Phe	His	Asn	Gly	Asn	Pro	Arg	Tyr	Thr	Arg
	35					40					45				
Val	Thr	Ala	Met	Glu	Tyr	Leu	Asn	Gly	Gln	Asp	Cys	Ser	Leu	Leu	Leu
	50					55				60					
Thr	Ala	Thr	Asp	Asp	Gly	Ala	Ile	Arg	Val	Trp	Lys	Asn	Phe	Ala	Asp
65					70				75					80	
Leu	Glu	Lys	Asn	Pro	Glu	Met	Val	Thr	Ala	Trp	Gln	Gly	Leu	Ser	Asp
			85					90					95		
Met	Leu	Pro	Thr	Thr	Arg	Gly	Ala	Gly	Met	Val	Val	Asp	Trp	Glu	Gln
		100					105					110			
Glu	Thr	Gly	Leu	Leu	Met	Ser	Ser	Gly	Asp	Val	Arg	Ile	Val	Arg	Ile
	115					120					125				
Trp	Asp	Thr	Asp	Arg	Glu	Met	Lys	Val	Gln	Asp	Ile	Pro	Thr	Gly	Ala
	130					135					140				
Asp	Ser	Cys	Val	Thr	Ser	Leu	Ser	Cys	Asp	Ser	His	Arg	Ser	Leu	Ile
145					150				155					160	
Val	Ala	Gly	Leu	Gly	Asp	Gly	Ser	Ile	Arg	Val	Tyr	Asp	Arg	Arg	Met
			165					170						175	
Ala	Leu	Ser	Glu	Cys	Arg	Val	Met	Thr	Tyr	Arg	Glu	His			
		180						185							

<210> 3493

<211> 2244

<212> DNA

<213> Homo sapiens

<400> 3493

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120
aatcactctg aaagatcaga caatagatca gaagcttctg agcgttctga ccatgaggac
180
aatgaccct cagatgtaga tcagcacagt ggatcagaag cccctaata tgaatgaagac
240
gaaggtcata gatcggtatg agggagccat cattcagaag cagaagggtc tgaaaaagca
300
cattcagatg atgaaaaatg gggcagagaa gataaaagt accagtcaga tgatgaaaag
360
atacaaaatt ctgatgatga ggagagggca caaggatctg atgaagataa gctgcagaat
420
tctgacgatg atgagaaaat gcagaacaca gatgatgagg agaggcctca gctttccgat
480
gatgagagac aacagctatc tgaggaggaa aaggctaatt ctgatgatga acggccggta
540
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960
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1080
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1200
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1680

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 1740
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 1920
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 1980
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 2040
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 2100
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 2220
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 2244

<210> 3494

<211> 628

<212> PRT

<213> Homo sapiens

<400> 3494

Xaa	Gly	Gly	Tyr	Pro	Cys	Ser	Asp	Gln	Asp	Glu	Arg	Gly	Asp	Ser	Gly
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Gln	Pro	Ser	Asn	Lys	Glu	Leu	Phe	Gly	Asp	Asp	Ser	Glu	Asp	Glu	Gly
			20					25					30		
Ala	Ser	His	His	Ser	Gly	Ser	Asp	Asn	His	Ser	Glu	Arg	Ser	Asp	Asn
		35					40					45			
Arg	Ser	Glu	Ala	Ser	Glu	Arg	Ser	Asp	His	Glu	Asp	Asn	Asp	Pro	Ser
		50					55					60			
Asp	Val	Asp	Gln	His	Ser	Gly	Ser	Glu	Ala	Pro	Asn	Asp	Asp	Glu	Asp
65					70					75				80	
Glu	Gly	His	Arg	Ser	Asp	Gly	Gly	Ser	His	Ser	Glu	Ala	Glu	Gly	
			85					90					95		
Ser	Glu	Lys	Ala	His	Ser	Asp	Asp	Glu	Lys	Trp	Gly	Arg	Glu	Asp	Lys
			100					105					110		
Ser	Asp	Gln	Ser	Asp	Asp	Glu	Lys	Ile	Gln	Asn	Ser	Asp	Asp	Glu	Glu
		115					120						125		
Arg	Ala	Gln	Gly	Ser	Asp	Glu	Asp	Lys	Leu	Gln	Asn	Ser	Asp	Asp	Asp
		130					135						140		
Glu	Lys	Met	Gln	Asn	Thr	Asp	Asp	Glu	Glu	Arg	Pro	Gln	Leu	Ser	Asp
145					150					155				160	
Asp	Glu	Arg	Gln	Gln	Leu	Ser	Glu	Glu	Glu	Lys	Ala	Asn	Ser	Asp	Asp
			165					170						175	
Glu	Arg	Pro	Val	Ala	Ser	Asp	Asn	Asp	Asp	Glu	Lys	Gln	Asn	Ser	Asp
			180					185					190		
Asp	Glu	Glu	Gln	Pro	Gln	Leu	Ser	Asp	Glu	Glu	Lys	Met	Gln	Asn	Ser
		195					200					205			
Asp	Asp	Glu	Arg	Pro	Gln	Ala	Pro	Asp	Glu	Glu	His	Arg	His	Ser	Asp

210	215	220
Asp Glu Glu Glu Gln Asp His Lys Ser Glu Ser Ala Arg Gly Ser Asp		
225	230	235
Ser Glu Asp Glu Val Leu Arg Met Lys Arg Lys Asn Ala Ile Ala Ser		240
	245	250
Asp Ser Glu Ala Asp Ser Asp Thr Glu Val Pro Lys Asp Asn Ser Gly		255
	260	265
Thr Met Asp Leu Phe Gly Gly Ala Asp Asp Ile Ser Ser Gly Ser Asp		270
	275	280
Gly Glu Asp Lys Pro Pro Thr Pro Gly Gln Pro Val Asp Glu Asn Gly		285
	290	295
Leu Pro Gln Asp Gln Gln Glu Glu Glu Pro Ile Pro Glu Thr Arg Ile		300
305	310	315
Glu Val Glu Ile Pro Lys Val Asn Thr Asp Leu Gly Asn Asp Leu Tyr		320
	325	330
Phe Val Lys Leu Pro Asn Phe Leu Ser Val Glu Pro Arg Pro Phe Asp		335
	340	345
Pro Gln Tyr Tyr Glu Asp Glu Phe Glu Asp Glu Glu Met Leu Asp Glu		350
	355	360
Glu Gly Arg Thr Arg Leu Lys Leu Lys Val Glu Asn Thr Ile Arg Trp		365
	370	375
Arg Ile Arg Arg Asp Glu Glu Gly Asn Glu Ile Lys Glu Ser Asn Ala		380
385	390	395
Arg Ile Val Lys Trp Ser Asp Gly Ser Met Ser Leu His Leu Gly Asn		400
	405	410
Glu Val Phe Asp Val Tyr Lys Ala Pro Leu Gln Gly Asp His Asn His		415
	420	425
Leu Phe Ile Arg Gln Gly Thr Gly Leu Gln Gly Gln Ala Val Phe Lys		430
	435	440
Ala Lys Leu Thr Phe Arg Pro His Ser Thr Asp Ser Ala Thr His Arg		445
	450	455
Lys Met Thr Leu Ser Leu Ala Asp Arg Cys Ser Lys Thr Gln Lys Ile		460
465	470	475
Arg Ile Leu Pro Met Ala Gly Arg Asp Pro Glu Cys Gln Arg Thr Glu		480
	485	490
Met Ile Lys Lys Glu Glu Glu Arg Leu Arg Ala Ser Ile Arg Arg Glu		495
	500	505
Ser Gln Gln Arg Arg Met Arg Glu Lys Gln His Gln Arg Gly Leu Ser		510
	515	520
Ala Ser Tyr Leu Glu Pro Asp Arg Tyr Asp Glu Glu Glu Glu Gly Glu		525
	530	535
Glu Ser Ile Ser Leu Ala Ala Ile Lys Asn Arg Tyr Lys Gly Gly Ile		540
545	550	555
Arg Glu Glu Arg Ala Arg Ile Tyr Ser Ser Asp Ser Asp Glu Gly Ser		560
	565	570
Glu Glu Asp Lys Ala Gln Arg Leu Leu Lys Ala Lys Lys Leu Thr Ser		575
	580	585
Asp Glu Glu Gly Glu Pro Ser Gly Lys Arg Lys Ala Glu Asp Asp Asp		590
	595	600
Lys Ala Asn Lys Lys His Lys Lys Tyr Val Ile Ser Asp Glu Glu Glu		605
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Glu Asp Asp Asp		620
625		

<210> 3495

<211> 1085

<212> DNA

<213> Homo sapiens

<400> 3495

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 120
 gcgtccccgg aggagatcaa gaaggcctat cggaagctgg cgctcaagta ccaccggac
 180
 aagaacccgg atgagggcga gaagtttaaa ctcatatccc aggcatatga agtgctttca
 240
 gatccaaaga aaagggatgt ttatgaccaa ggcggagagc aggcaattaa agaaggaggc
 300
 tcaggcagcc ccagcttctc ttcacccatg gacatctttg acatgttctt tgggtggtggt
 360
 ggacggatgg ctagagagag aagaggcaag aatgttgtac accagttatc tgtaactctt
 420
 gaagatctat ataatggagt cacgaagaaa ttggccctcc agaaaaatgt aatttgtgag
 480
 aaatgtgaag gtgttggtgg gaagaagga tcggtggaga agtgcccgt gtgcaagggg
 540
 cgggggatgc agatccacat ccagcagatc gggccgggca tggtagagca gatccagacc
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 660
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 720
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 780
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 840
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 900
 acgataaaaa cattggacaa tcgaattctt gttattacat ccaagcagg tgaggtgata
 960
 aagcacgggg acctgagatg cgtgcgcgat gaaggaatgc ccatctacaa agcaccctg
 1020
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<210> 3496

<211> 337

<212> PRT

<213> Homo sapiens

<400> 3496

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20 25 30
 Tyr His Pro Asp Lys Asn Pro Asp Glu Gly Glu Lys Phe Lys Leu Ile
 35 40 45
 Ser Gln Ala Tyr Glu Val Leu Ser Asp Pro Lys Lys Arg Asp Val Tyr
 50 55 60
 Asp Gln Gly Gly Glu Gln Ala Ile Lys Glu Gly Gly Ser Gly Ser Pro
 65 70 75 80
 Ser Phe Ser Ser Pro Met Asp Ile Phe Asp Met Phe Phe Gly Gly Gly
 85 90 95
 Gly Arg Met Ala Arg Glu Arg Arg Gly Lys Asn Val Val His Gln Leu
 100 105 110
 Ser Val Thr Leu Glu Asp Leu Tyr Asn Gly Val Thr Lys Lys Leu Ala
 115 120 125
 Leu Gln Lys Asn Val Ile Cys Glu Lys Cys Glu Gly Val Gly Gly Lys
 130 135 140
 Lys Gly Ser Val Glu Lys Cys Pro Leu Cys Lys Gly Arg Gly Met Gln
 145 150 155 160
 Ile His Ile Gln Gln Ile Gly Pro Gly Met Val Gln Gln Ile Gln Thr
 165 170 175
 Val Cys Ile Glu Cys Lys Gly Gln Gly Glu Arg Ile Asn Pro Lys Asp
 180 185 190
 Arg Cys Glu Ser Cys Ser Gly Ala Lys Val Ile Arg Glu Lys Lys Ile
 195 200 205
 Ile Glu Val His Val Glu Lys Gly Met Lys Asp Gly Gln Lys Ile Leu
 210 215 220
 Phe His Gly Glu Gly Asp Gln Glu Pro Glu Leu Glu Pro Gly Asp Val
 225 230 235 240
 Ile Ile Val Leu Asp Gln Lys Asp His Ser Val Phe Gln Arg Arg Gly
 245 250 255
 His Asp Leu Ile Met Lys Met Lys Ile Gln Leu Ser Glu Ala Leu Cys
 260 265 270
 Gly Phe Lys Lys Thr Ile Lys Thr Leu Asp Asn Arg Ile Leu Val Ile
 275 280 285
 Thr Ser Lys Ala Gly Glu Val Ile Lys His Gly Asp Leu Arg Cys Val
 290 295 300
 Arg Asp Glu Gly Met Pro Ile Tyr Lys Ala Pro Leu Glu Lys Gly Ile
 305 310 315 320
 Leu Ile Ile Gln Phe Leu Val Ile Phe Pro Xaa Lys His Trp Leu Ser
 325 330 335
 Leu

<210> 3497

<211> 1638

<212> DNA

<213> Homo sapiens

<400> 3497

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 120
 tttttagtat atccttctaa aaagttttcc tgagaatttt tagtttggcc tctcaagttt
 180

ccttatttta ccttttctta aattacctcc ctcttcctt agtgaaatga gccttccttc
240
agcatacgca acttatcett attgcttttt tcatacccaa ttttttggtt tatctctttc
300
agccaactgg gtctgaagt agctgaaatg cgaaaaaggc agcagtccca aaatgaagga
360
acacctgctg tgtctcaagc tcctggaaac cagaggccca acaacacctg ttgcttttgt
420
tggtgctggt gttgcagctg ctctgcctc actgtgagga atgaagaaag aggggaaaat
480
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540
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600
ccagcaggaa gaaacctttt cagagagttc ctccgaacag aatacagtga agagaaccta
660
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720
aaggctagga tgatatatga agattacatt tctatactat caccaaaaga ggtcagttct
780
gattctcgag ttgagaggt gatcaataga aatctgttgg atcccaatcc tcacatgtat
840 aacttcagat atatacttta atgcacagag attcttttcc aaggtttttg 900
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1020
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1080
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1140
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1440
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1638

<210> 3498

<211> 210

<212> PRT

<213> Homo sapiens

<400> 3498

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 20 25 30
 Cys Cys Cys Cys Ser Cys Ser Cys Leu Thr Val Arg Asn Glu Glu Arg
 35 40 45
 Gly Glu Asn Ala Gly Arg Pro Thr His Thr Thr Lys Met Glu Ser Ile
 50 55 60
 Gln Val Leu Glu Glu Cys Gln Asn Pro Thr Ala Glu Glu Val Leu Ser
 65 70 75 80
 Trp Ser Gln Asn Phe Asp Lys Met Met Lys Ala Pro Ala Gly Arg Asn
 85 90 95
 Leu Phe Arg Glu Phe Leu Arg Thr Glu Tyr Ser Glu Glu Asn Leu Leu
 100 105 110
 Phe Trp Leu Ala Cys Glu Asp Leu Lys Lys Glu Gln Asn Lys Lys Val
 115 120 125
 Ile Glu Glu Lys Ala Arg Met Ile Tyr Glu Asp Tyr Ile Ser Ile Leu
 130 135 140
 Ser Pro Lys Glu Val Ser Leu Asp Ser Arg Val Arg Glu Val Ile Asn
 145 150 155 160
 Arg Asn Leu Leu Asp Pro Asn Pro His Met Tyr Glu Asp Ala Gln Leu
 165 170 175
 Gln Ile Tyr Thr Leu Met His Arg Asp Ser Phe Pro Arg Phe Leu Asn
 180 185 190
 Ser Gln Ile Tyr Lys Ser Phe Val Glu Ser Thr Ala Gly Ser Ser Ser
 195 200 205
 Glu Ser
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<210> 3499

<211> 732

<212> DNA

<213> Homo sapiens

<400> 3499

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 120
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 180
 aacagactcn aacctcagga tngttctatt ttgcgccaga agcaataatt ttttttctt
 240
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 300
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 360
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 420
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 480
 ccaggccaga ggcaaaggca aggagcaggc agtacgccag caagagtctt tgtccacggg
 540

agcccatctt cctgccgggc cctccgtccc gccggccgct cctcccgcg cgcgccctaga
 600
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 720
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 732

<210> 3500

<211> 168

<212> PRT

<213> Homo sapiens

<400> 3500

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Gly	Ala	Arg	Arg	Ser	Pro	Gly	Thr	Trp	Arg	Tyr	Arg	Gly	His	Ser	Ser
		20						25				30			
Ala	Ser	Thr	Gly	Lys	Gln	Gly	Ala	Pro	Gly	Pro	Asp	Trp	Ala	Cys	Ile
		35				40					45				
Phe	His	Val	Val	Leu	Gln	Pro	Ser	Arg	His	Gly	Pro	Glu	Ala	Thr	Ala
50					55					60					
Ala	Pro	Gln	Ser	Pro	Pro	Thr	Pro	Ala	Val	Pro	Pro	Gly	His	Gly	Ala
65				70					75			80			
His	Asp	Ser	Gly	Pro	Gly	Gln	Arg	Gln	Arg	Gln	Gly	Ala	Gly	Ser	Thr
			85					90				95			
Pro	Ala	Arg	Val	Pro	Val	His	Gly	Ser	Pro	Ser	Ser	Cys	Arg	Ala	Leu
		100					105					110			
Arg	Pro	Ala	Gly	Arg	Ser	Ser	Arg	Ala	Ala	Pro	Arg	Ala	Ser	Pro	Ala
		115				120					125				
Gly	Gln	Ala	Ser	Ser	Arg	Pro	Xaa	Ser	Gly	Ala	Met	His	Arg	Leu	Gly
	130				135				140						
Glu	Gly	Asn	Arg	Ala	Gly	Glu	Lys	Val	Phe	Arg	Arg	Thr	Ala	Val	Gln
145				150				155				160			
Lys	Arg	Arg	Val	Gly	Gly	Gly	Thr								
			165												

<210> 3501

<211> 691

<212> DNA

<213> Homo sapiens

<400> 3501

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 120
 cccctatag agaagatgga tgcattcttg tccatgcttg ctaattgcga gaagctttca
 180
 ctgtctacaa actgcattga aaaaattgcc aacctgaatg gcttaaaaaa cttgaggata
 240
 ttatcttttag gaagaaacaa cataaagaac ttaaatggac tggaggcagt aggggacaca
 300

ttagaagaac tgtggatctc ctacaatttt attgagaagt tgaaagggat ccacataatg
 360
 aagaaattga agattctcta catgtctaataac aacctggtaa aagactgggc tgagtttgtg
 420
 aagctggcag aactgccatg cctcgaagac ctggtgtttg taggcaatcc cttggaagag
 480
 aaacattctg ctgagaataa ctggattgaa gaagcaacca agagagtgcc caaactgaaa
 540
 aagctggatg gtactccagt aattaaaggg gatgaggaag aagacaacta atgccacgct
 600
 ttccactgtg tgttaactta tttaaagtgc ataagaacaa tagataaatt ttatataatt
 660
 gtctatttta aaaaaaaaaa aaaaaaaaaa a
 691

<210> 3502

<211> 196

<212> PRT

<213> Homo sapiens

<400> 3502

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Leu	Ala	Arg	Trp	Glu	Glu	Lys	Thr	Gly	Gln	Arg	Pro	Ser	Glu	Ala	Lys
			20					25					30		
Glu	Ile	Lys	Leu	Tyr	Ala	Gln	Ile	Pro	Pro	Ile	Glu	Lys	Met	Asp	Ala
		35					40					45			
Ser	Leu	Ser	Met	Leu	Ala	Asn	Cys	Glu	Lys	Leu	Ser	Leu	Ser	Thr	Asn
	50					55					60				
Cys	Ile	Glu	Lys	Ile	Ala	Asn	Leu	Asn	Gly	Leu	Lys	Asn	Leu	Arg	Ile
65				70					75					80	
Leu	Ser	Leu	Gly	Arg	Asn	Asn	Ile	Lys	Asn	Leu	Asn	Gly	Leu	Glu	Ala
			85					90					95		
Val	Gly	Asp	Thr	Leu	Glu	Glu	Leu	Trp	Ile	Ser	Tyr	Asn	Phe	Ile	Glu
			100					105					110		
Lys	Leu	Lys	Gly	Ile	His	Ile	Met	Lys	Lys	Leu	Lys	Ile	Leu	Tyr	Met
		115				120						125			
Ser	Asn	Asn	Leu	Val	Lys	Asp	Trp	Ala	Glu	Phe	Val	Lys	Leu	Ala	Glu
	130					135					140				
Leu	Pro	Cys	Leu	Glu	Asp	Leu	Val	Phe	Val	Gly	Asn	Pro	Leu	Glu	Glu
145				150				155					160		
Lys	His	Ser	Ala	Glu	Asn	Asn	Trp	Ile	Glu	Glu	Ala	Thr	Lys	Arg	Val
			165					170					175		
Pro	Lys	Leu	Lys	Lys	Leu	Asp	Gly	Thr	Pro	Val	Ile	Lys	Gly	Asp	Glu
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Glu	Glu	Asp	Asn												
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<210> 3503

<211> 857

<212> DNA

<213> Homo sapiens

<400> 3503

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 120
 aatgcccaga gattagcggg gaagctccga gccagaaac gggaacaaga cacaagaag
 180
 gagccggtgt ccacaaacgc tgttcagcgg agagtgcag aaatagtgcg gttcacacgg
 240
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 300
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 360
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 420
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 480
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 600
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 660
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 720
 gttgctgtaa ctcatgacca ggtgctcagc agcactctct cctccgcctt cgtggagctc
 780
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 840
 ccaatccttg gtgatca
 857

<210> 3504

<211> 285

<212> PRT

<213> Homo sapiens

<400> 3504

Ala	Ala	Pro	Arg	Trp	Ser	Ala	Ser	Gly	Pro	Trp	Ile	Arg	Gly	Asn	Gly
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Gln	Gly	Cys	Gly	Ser	Leu	Phe	Thr	Leu	Val	Ser	Lys	Pro	Phe	Cys	Ala
			20					25					30		
Ala	Ala	Ala	Ala	Ser	Thr	Ala	Ile	Asn	Ala	Gln	Arg	Leu	Ala	Glu	Lys
			35				40					45			
Leu	Arg	Ala	Gln	Lys	Arg	Glu	Gln	Asp	Thr	Lys	Lys	Glu	Pro	Val	Ser
	50				55						60				
Thr	Asn	Ala	Val	Gln	Arg	Val	Gln	Glu	Ile	Val	Arg	Phe	Thr	Arg	
65				70				75					80		
Gln	Leu	Gln	Arg	Val	His	Pro	Asn	Val	Leu	Ala	Lys	Ala	Leu	Thr	Arg
			85					90					95		
Gly	Ile	Leu	His	Gln	Asp	Lys	Asn	Leu	Val	Val	Ile	Asn	Lys	Pro	Tyr
			100					105					110		
Gly	Leu	Pro	Val	His	Gly	Gly	Pro	Gly	Val	Gln	Leu	Cys	Ile	Thr	Asp
		115					120					125			
Val	Leu	Pro	Ile	Leu	Ala	Lys	Met	Leu	His	Gly	His	Lys	Ala	Glu	Pro

130	135	140																	
Leu	His	Leu	Cys	His	Arg	Leu	Asp	Lys	Glu	Thr	Thr	Gly	Val	Met	Val				
145					150					155				160					
Leu	Ala	Trp	Asp	Lys	Asp	Met	Ala	His	Gln	Val	Gln	Glu	Leu	Phe	Arg				
				165					170					175					
Thr	Arg	Gln	Val	Val	Lys	Lys	Tyr	Trp	Ala	Ile	Thr	Val	His	Val	Pro				
			180					185				190							
Met	Pro	Ser	Ala	Gly	Val	Val	Asp	Ile	Pro	Ile	Val	Glu	Lys	Glu	Gly				
	195						200					205							
Gln	Gly	Gln	Gln	Gln	His	Pro	Arg	Met	Thr	Leu	Ser	Pro	Ser	Ser	Arg				
210						215					220								
Met	Asp	Asp	Gly	Lys	Met	Val	Lys	Val	Arg	Arg	Ser	Arg	Asn	Ala	Gln				
225					230				235					240					
Val	Ala	Val	Thr	Gln	Tyr	Gln	Val	Leu	Ser	Ser	Thr	Leu	Ser	Ser	Ala				
			245					250				255							
Leu	Val	Glu	Leu	Gln	Pro	Ile	Thr	Gly	Ile	Lys	His	Gln	Leu	Arg	Val				
			260				265					270							
His	Leu	Ser	Phe	Gly	Leu	Asp	Cys	Pro	Ile	Leu	Gly	Asp							
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<210> 3505

<211> 1612

<212> DNA

<213> Homo sapiens

<400> 3505

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120
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180
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240
caccgggtgg ccgtgaaggg gcggcaggcg ctgcccaccg aggcggccat cctcacgctc
300
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360
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420
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480
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540
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600
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840

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 960
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 1080
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 1200
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 1320
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 1380
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 1440
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 1500
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 1612

<210> 3506

<211> 502

<212> PRT

<213> Homo sapiens

<400> 3506

Val His Glu Leu His Leu Ser Ala Leu Gln Lys Ala Gln Val Ala Leu
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 Met Thr Leu Thr Leu Phe Pro Val Arg Leu Leu Val Ala Ala Met
 20 25 30
 Met Leu Leu Ala Trp Pro Leu Ala Leu Val Ala Ser Leu Gly Ser Ala
 35 40 45
 Glu Lys Glu Pro Glu Gln Pro Pro Ala Leu Trp Arg Lys Val Val Asp
 50 55 60
 Phe Leu Leu Lys Ala Ile Met Arg Thr Met Trp Phe Ala Gly Gly Phe
 65 70 75 80
 His Arg Val Ala Val Lys Gly Arg Gln Ala Leu Pro Thr Glu Ala Ala
 85 90 95
 Ile Leu Thr Leu Ala Pro His Ser Ser Tyr Phe Asp Ala Ile Pro Val
 100 105 110
 Thr Met Thr Met Ser Ser Ile Val Met Lys Thr Glu Ser Arg Asp Ile
 115 120 125
 Pro Ile Trp Gly Thr Leu Ile Gln Tyr Ile Arg Pro Val Phe Val Ser
 130 135 140
 Arg Ser Asp Gln Asp Ser Arg Arg Lys Thr Val Glu Glu Ile Lys Arg
 145 150 155 160
 Arg Ala Gln Ser Asn Gly Lys Trp Pro Gln Ile Met Ile Phe Pro Glu

165										170				175			
Gly	Thr	Cys	Thr	Asn	Arg	Thr	Cys	Leu	Ile	Thr	Phe	Lys	Pro	Gly	Ala		
				180					185					190			
Phe	Ile	Pro	Gly	Ala	Pro	Val	His	Pro	Gly	Val	Leu	Arg	Tyr	Pro	Asn		
				195					200					205			
Lys	Leu	Asp	Thr	Ile	Thr	Trp	Thr	Trp	Gln	Gly	Pro	Gly	Ala	Leu	Glu		
				210					215					220			
Ile	Leu	Trp	Leu	Thr	Leu	Cys	Gln	Phe	His	Asn	Gln	Val	Glu	Ile	Glu		
				225					230					235			
Phe	Leu	Pro	Val	Tyr	Ser	Pro	Ser	Glu	Glu	Glu	Lys	Arg	Asn	Pro	Ala		
				245					250					255			
Leu	Tyr	Ala	Ser	Asn	Val	Arg	Arg	Val	Met	Ala	Glu	Ala	Leu	Gly	Val		
				260					265					270			
Ser	Val	Thr	Asp	Tyr	Thr	Phe	Glu	Asp	Cys	Gln	Leu	Ala	Leu	Ala	Glu		
				275					280					285			
Gly	Gln	Leu	Arg	Leu	Pro	Ala	Asp	Thr	Cys	Leu	Leu	Glu	Phe	Ala	Arg		
				290					295					300			
Leu	Val	Arg	Gly	Leu	Gly	Leu	Lys	Pro	Glu	Lys	Leu	Glu	Lys	Asp	Leu		
				305					310					315			
Asp	Arg	Tyr	Ser	Glu	Arg	Ala	Arg	Met	Lys	Gly	Gly	Glu	Lys	Ile	Gly		
				325					330					335			
Ile	Ala	Glu	Phe	Ala	Ala	Ser	Leu	Glu	Val	Pro	Val	Ser	Asp	Leu	Leu		
				340					345					350			
Glu	Asp	Met	Phe	Ser	Leu	Phe	Asp	Glu	Ser	Gly	Ser	Gly	Glu	Val	Asp		
				355					360					365			
Leu	Arg	Glu	Cys	Val	Val	Ala	Leu	Ser	Val	Val	Cys	Trp	Pro	Ala	Arg		
				370					375					380			
Thr	Leu	Asp	Thr	Ile	Gln	Leu	Ala	Phe	Lys	Met	Tyr	Gly	Ala	Gln	Glu		
				385					390					395			
Asp	Gly	Ser	Val	Gly	Glu	Gly	Asp	Leu	Ser	Cys	Ile	Leu	Lys	Thr	Ala		
				405					410					415			
Leu	Gly	Val	Ala	Glu	Leu	Thr	Val	Thr	Asp	Leu	Phe	Arg	Ala	Ile	Asp		
				420					425					430			
Gln	Glu	Glu	Lys	Gly	Lys	Ile	Thr	Phe	Ala	Asp	Phe	His	Arg	Phe	Ala		
				435					440					445			
Glu	Met	Tyr	Pro	Ala	Phe	Ala	Glu	Glu	Tyr	Leu	Tyr	Pro	Asp	Gln	Thr		
				450					455					460			
His	Phe	Glu	Ser	Cys	Ala	Glu	Thr	Ser	Pro	Ala	Pro	Ile	Pro	Asn	Gly		
				465					470					475			
Phe	Cys	Ala	Asp	Phe	Ser	Pro	Glu	Asn	Ser	Asp	Ala	Gly	Arg	Lys	Pro		
				485					490					495			
Val	Arg	Lys	Lys	Leu	Asp												
500																	

<210> 3507

<211> 885

<212> DNA

<213> Homo sapiens

<400> 3507

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cgagcccgt ccccgccatc cgtgctcaag tcccactcgc ttagtcatt gttgatgctg
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 acctggggcca tggccccgag agccttcttc ctgcaaggtc tgtgggttct gccttacaac
 240
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 480
 gaccgcaagt tcaccatcag cctcactgcc ttctcttca tctgcccc ctccatcccc
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 660
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 720
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 780
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 885

<210> 3508

<211> 199

<212> PRT

<213> Homo sapiens

<400> 3508

Leu	Arg	Thr	Leu	Leu	Asn	Leu	Leu	Phe	Leu	Pro	Asp	Gly	Leu	Cys	Gln
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Arg	Arg	Leu	Leu	Cys	Glu	Val	Ala	Ile	Ala	Val	Tyr	Thr	Phe	Gly	Thr
		20					25					30			
Cys	Ile	Ala	Phe	Leu	Ile	Ile	Ile	Gly	Asp	Gln	Gln	Asp	Lys	Ile	Ile
	35					40					45				
Ala	Val	Met	Ala	Lys	Glu	Pro	Glu	Gly	Ala	Ser	Gly	Pro	Trp	Tyr	Thr
	50				55					60					
Asp	Arg	Lys	Phe	Thr	Ile	Ser	Leu	Thr	Ala	Phe	Leu	Phe	Ile	Leu	Pro
65				70				75					80		
Leu	Ser	Ile	Pro	Arg	Glu	Ile	Gly	Phe	Gln	Lys	Tyr	Ala	Ser	Phe	Leu
		85					90						95		
Ser	Val	Val	Gly	Thr	Trp	Tyr	Val	Thr	Ala	Ile	Val	Ile	Ile	Lys	Tyr
		100					105					110			
Ile	Trp	Pro	Asp	Lys	Glu	Met	Thr	Pro	Gly	Asn	Ile	Leu	Thr	Arg	Pro
	115				120						125				
Ala	Ser	Trp	Met	Ala	Val	Phe	Asn	Ala	Met	Pro	Thr	Ile	Cys	Phe	Gly
	130				135					140					
Phe	Gln	Cys	His	Val	Ser	Ser	Val	Pro	Val	Phe	Asn	Ser	Met	Gln	Gln
145				150				155					160		
Pro	Glu	Val	Lys	Thr	Trp	Gly	Gly	Val	Val	Thr	Ala	Ala	Met	Val	Ile

165 170 175
 Ala Leu Ala Val Tyr Met Gly Thr Gly Ile Cys Gly Phe Leu Thr Phe
 180 185 190
 Gly Ala Ala Val Asp Pro Asp
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<210> 3509
 <211> 331
 <212> DNA
 <213> Homo sapiens

<400> 3509
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 120
 gccctctgcg acggctcccc gaccgagggg gagctcccca cgcacgagca ggtcttctg
 180
 agccccccac ctctttaag ccccgagggg cctgggttgc ccagaagt ggaggagcgc
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 300
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 331

<210> 3510
 <211> 110
 <212> PRT
 <213> Homo sapiens

<400> 3510
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 20 25 30
 Leu Ala His Tyr His Val Ala Met Ala Leu Cys Asp Gly Ser Pro Thr
 35 40 45
 Glu Gly Glu Leu Pro Thr His Glu Gln Val Phe Leu Ser Pro Pro Pro
 50 55 60
 Pro Leu Ser Pro Arg Gly Pro Gly Leu Pro Gln Lys Leu Glu Glu Arg
 65 70 75 80
 Arg Gln Leu Gly Lys Ala Pro Met Gly Gly Val Pro Trp Gly Ser Asp
 85 90 95
 Gly His Gln Arg Trp Gln Gly Val Pro His His Pro His Ala
 100 105 110

<210> 3511
 <211> 3319
 <212> DNA
 <213> Homo sapiens

<400> 3511
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120
gatagtgacc gtaattcatc agaagaagga actgcagaga aatccaagaa actgaggact
180
acaaatgagc attctcagac ttgtgattgg ggtaatctcc ttcaggacat tattctccaa
240
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300
aaccagggtat ttcacatgcc tgacttgtgg agatgttttg aatttgaact gaatcagcca
360
gctacatctt atttgaaagc taccatcca gagctgatca aacagattat taaaagacat
420
tcaaaccatc tacaatatgt cagcttcaag gtggacagca gcaaggaatc agctgaagca
480
gcttgtgata tactatcgca acttgtgaat tgctctttaa aaacacttgg acttatttca
540
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600
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660
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720
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1140
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1260
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1320
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1440
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1680

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1740
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1860
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2100
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2220
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2280
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2340
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2580
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2700
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3300

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3319

<210> 3512

<211> 462

<212> PRT

<213> Homo sapiens

<400> 3512

Xaa Arg Ala Arg Gly Ala Ser Cys Glu Ser Arg Gly Thr Cys Ser Arg
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 Ser Arg Met Lys Arg Gly Gly Arg Asp Ser Asp Arg Asn Ser Ser Glu
 35 40 45
 Glu Gly Thr Ala Glu Lys Ser Lys Lys Leu Arg Thr Thr Asn Glu His
 50 55 60
 Ser Gln Thr Cys Asp Trp Gly Asn Leu Leu Gln Asp Ile Ile Leu Gln
 65 70 75 80
 Val Phe Lys Tyr Leu Pro Leu Leu Asp Arg Ala His Ala Ser Gln Val
 85 90 95
 Cys Arg Asn Trp Asn Gln Val Phe His Met Pro Asp Leu Trp Arg Cys
 100 105 110
 Phe Glu Phe Glu Leu Asn Gln Pro Ala Thr Ser Tyr Leu Lys Ala Thr
 115 120 125
 His Pro Glu Leu Ile Lys Gln Ile Ile Lys Arg His Ser Asn His Leu
 130 135 140
 Gln Tyr Val Ser Phe Lys Val Asp Ser Ser Lys Glu Ser Ala Glu Ala
 145 150 155 160
 Ala Cys Asp Ile Leu Ser Gln Leu Val Asn Cys Ser Leu Lys Thr Leu
 165 170 175
 Gly Leu Ile Ser Thr Ala Arg Pro Ser Phe Met Asp Leu Pro Lys Ser
 180 185 190
 His Phe Ile Ser Ala Leu Thr Val Val Phe Val Asn Ser Lys Ser Leu
 195 200 205
 Ser Ser Leu Lys Ile Asp Asp Thr Pro Val Asp Asp Pro Ser Leu Lys
 210 215 220
 Val Leu Val Ala Asn Asn Ser Asp Thr Leu Lys Leu Leu Lys Met Ser
 225 230 235 240
 Ser Cys Pro His Val Ser Pro Ala Gly Ile Leu Cys Val Ala Asp Gln
 245 250 255
 Cys His Gly Leu Arg Glu Leu Ala Leu Asn Tyr His Leu Leu Ser Asp
 260 265 270
 Glu Leu Leu Leu Ala Leu Ser Ser Glu Lys His Val Arg Leu Glu His
 275 280 285
 Leu Arg Ile Asp Val Val Ser Glu Asn Pro Gly Gln Thr His Phe His
 290 295 300
 Thr Ile Gln Lys Ser Ser Trp Asp Ala Phe Ile Arg His Ser Pro Lys
 305 310 315 320
 Val Asn Leu Val Met Tyr Phe Phe Leu Tyr Glu Glu Glu Phe Asp Pro
 325 330 335
 Phe Phe Arg Tyr Glu Ile Pro Ala Thr His Leu Tyr Phe Gly Arg Ser
 340 345 350
 Val Ser Lys Asp Val Leu Gly Arg Val Gly Met Thr Cys Pro Arg Leu

355	360	365
Val Glu Leu Val Val Cys Ala Asn Gly Leu Arg	Pro Leu Asp Glu Glu	
370	375	380
Leu Ile Arg Ile Ala Glu Arg Cys Lys Asn Leu Ser	Ala Ile Gly Leu	
385	390	395
Gly Glu Cys Glu Val Ser Cys Ser Ala Phe Val	Glu Phe Val Lys Met	400
405	410	415
Cys Gly Gly Arg Leu Ser Gln Leu Ser Ile Met	Glu Glu Val Leu Ile	
420	425	430
Pro Asp Gln Lys Tyr Ser Leu Glu Gln Ile His	Trp Glu Val Ser Lys	
435	440	445
His Leu Gly Arg Val Trp Phe Pro Asp Met Met	Pro Thr Trp	
450	455	460

<210> 3513

<211> 2103

<212> DNA

<213> Homo sapiens

<400> 3513

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<212> PRT

<213> Homo sapiens

<400> 3516

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<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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 Ala Asn Gly Val Leu Leu Ala Thr Pro Leu Ala Gly Pro Gly Pro Ser
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 Pro Thr Thr Val Pro Ser Pro Ala Ser Gly Lys Pro Ser Ser Glu Pro
 85 90 95
 Pro Pro Ala Pro Glu Ser Ala Ala Asp Ser Gly Val Glu Glu Ala Asp
 100 105 110
 Thr Arg Ser Ser Ser Asp Pro His Leu Glu Thr Thr Ser Thr Ile Ser
 115 120 125
 Thr Val Ser Ser Met Ser Thr Leu Ser Ser Glu Ser Gly Glu Leu Thr
 130 135 140
 Asp Thr His Thr Ser Phe Ala Asp Gly His Thr Phe Leu Leu Glu Lys
 145 150 155 160
 Pro Pro Val Pro Pro Lys Pro Lys Leu Lys Ser Pro Leu Gly Lys Gly
 165 170 175
 Pro Val Thr Phe Arg Asp Pro Leu Leu Lys Gln Ser Ser Asp Ser Glu
 180 185 190
 Leu Met Ala Gln Gln His His Ala Ser Ala Gly Leu Ala Ser Ala
 195 200 205
 Ala Gly Pro Ala Arg Pro Arg Tyr Leu Phe Gln Arg Arg Ser Lys Leu
 210 215 220
 Trp Gly Asp Pro Val Glu Ser Arg Gly Leu Pro Gly Pro Glu Asp Asp
 225 230 235 240
 Lys Pro Thr Val Ile Ser Glu Leu Ser Ser Arg Leu Gln Gln Leu Asn
 245 250 255
 Lys Asp Thr Arg Ser Leu Gly Glu Glu Pro Val Gly Gly Leu Gly Ser
 260 265 270
 Leu Leu Asp Pro Ala Lys Lys Ser Pro Ile Ala Ala Arg Ser Pro
 275 280 285
 Leu Ser Ser Leu Gly Leu Gly Trp Tyr Val Asp Ala Thr Ser
 290 295 300

<210> 3521

<211> 638

<212> DNA

<213> Homo sapiens

<400> 3521

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 120
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 180
 ccgcatcaac agcacgtga ccagggccca ccaggacccc acctcgacct tcaccaagat
 240

ctacaggcgg agcctctgcg tctgcagge ctgggtggag gactgctacg ctgtggactt
 300
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 360
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 540
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 638

<210> 3522

<211> 181

<212> PRT

<213> Homo sapiens

<400> 3522

Cys	Leu	Pro	Gly	Gly	Leu	Cys	Ala	Ala	Ile	Pro	Leu	His	Leu	Pro	Leu
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Leu	Leu	His	Thr	Pro	Arg	Leu	Pro	Ala	Leu	Pro	Pro	Arg	Pro	His	Gln
			20					25					30		
Gln	His	Ala	Asp	Gln	Gly	Pro	Pro	Gly	Pro	His	Leu	Asp	Leu	His	Gln
		35				40					45				
Asp	Leu	Gln	Ala	Glu	Pro	Leu	Arg	Pro	Ala	Gly	Leu	Gly	Gly	Gly	Leu
		50				55					60				
Leu	Arg	Cys	Gly	Leu	Pro	Ser	Glu	Gln	Arg	Ala	Ala	Gly	Glu	Ala	Arg
65					70				75					80	
Gly	Leu	His	Leu	Leu	Gln	Asp	Pro	Thr	Pro	Gly	Arg	Leu	Cys	Gln	Ala
			85					90						95	
Pro	Ala	Gly	Pro	Pro	Gly	Gly	Gly	His	Gly	Pro	Ala	Gly	Arg	Gly	Gln
		100				105						110			
Pro	Ser	Arg	His	Arg	Pro	Gly	Glu	Pro	Gln	Gly	Gly	Arg	Gly	Gly	Xaa
		115				120					125				
Pro	Asp	Pro	Ser	Thr	Pro	Ser	Val	Arg	Gly	Ser	Gln	Arg	Thr	Ala	Ser
		130				135					140				
Pro	Gly	Arg	Ala	Ser	Pro	Gly	Gly	Cys	Pro	Glu	Ala	Thr	Gly	Trp	Cys
145					150				155					160	
Cys	Arg	His	Thr	Arg	Ser	Ala	Pro	Thr	Pro	Leu	Leu	Pro	Pro	Cys	Pro
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Ser	Pro	Ala	Ser	Ser											
			180												

<210> 3523

<211> 2614

<212> DNA

<213> Homo sapiens

<400> 3523

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120
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180
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240
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360
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420
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480
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720
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1140
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1260
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1380
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1440
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1560
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1620
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1680

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 1980
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 2100
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 2160
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 2580
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 2614

<210> 3524

<211> 444

<212> PRT

<213> Homo sapiens

<400> 3524

Met	Ala	Pro	Asp	Pro	Leu	Ala	Ala	Glu	Thr	Ala	Ala	Gln	Gly	Leu	Thr
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Pro	Arg	Tyr	Phe	Thr	Trp	Asp	Glu	Val	Ala	Gln	Arg	Ser	Gly	Cys	Glu
		20					25						30		
Glu	Arg	Trp	Leu	Val	Ile	Asp	Arg	Lys	Val	Tyr	Asn	Ile	Ser	Asp	Phe
		35				40					45				
Ser	Arg	Arg	His	Pro	Gly	Gly	Ser	Arg	Val	Ile	Ser	His	Tyr	Ala	Gly
		50			55					60					
Gln	Asp	Ala	Thr	Asp	Pro	Phe	Val	Ala	Phe	His	Ile	Asn	Lys	Gly	Leu
65				70				75						80	
Val	Lys	Lys	Tyr	Met	Asn	Ser	Leu	Leu	Ile	Gly	Glu	Leu	Ser	Pro	Glu
		85					90						95		
Gln	Pro	Ser	Phe	Glu	Pro	Thr	Lys	Asn	Lys	Glu	Leu	Thr	Asp	Glu	Phe
		100					105						110		
Arg	Glu	Leu	Arg	Ala	Thr	Val	Glu	Arg	Met	Gly	Leu	Met	Lys	Ala	Asn

115	120	125
His Val Phe Phe Leu Leu Tyr Leu Leu His Ile Leu Leu Leu Asp Gly		
130	135	140
Ala Ala Trp Leu Thr Leu Trp Val Phe Gly Thr Ser Phe Leu Pro Phe		
145	150	155
Leu Leu Cys Ala Val Leu Leu Ser Ala Val Gln Ala Gln Ala Gly Trp		
165	170	175
Leu Gln His Asp Phe Gly His Leu Ser Val Phe Ser Thr Ser Lys Trp		
180	185	190
Asn His Leu Leu His His Phe Val Ile Gly His Leu Lys Gly Ala Pro		
195	200	205
Ala Ser Trp Trp Asn His Met His Phe Gln His His Ala Lys Pro Asn		
210	215	220
Cys Phe Arg Lys Asp Pro Asp Ile Asn Met His Pro Phe Phe Phe Ala		
225	230	235
Leu Gly Lys Ile Leu Ser Val Glu Leu Gly Lys Gln Lys Lys Lys Tyr		
245	250	255
Met Pro Tyr Asn His Gln His Lys Tyr Phe Phe Leu Ile Gly Pro Pro		
260	265	270
Ala Leu Leu Pro Leu Tyr Phe Gln Trp Tyr Ile Phe Tyr Phe Val Ile		
275	280	285
Gln Arg Lys Lys Trp Val Asp Leu Val Trp Met Ile Thr Phe Tyr Val		
290	295	300
Arg Phe Phe Leu Thr Tyr Val Pro Leu Leu Gly Leu Lys Ala Phe Leu		
305	310	315
Gly Leu Phe Phe Ile Val Arg Phe Leu Glu Ser Asn Trp Phe Val Trp		
325	330	335
Val Thr Gln Met Asn His Ile Pro Met His Ile Asp His Asp Arg Asn		
340	345	350
Met Asp Trp Val Ser Thr Gln Leu Gln Ala Thr Cys Asn Val His Lys		
355	360	365
Ser Ala Phe Asn Asp Trp Phe Ser Gly His Leu Asn Phe Gln Ile Glu		
370	375	380
His His Leu Phe Pro Thr Met Pro Arg His Asn Tyr His Lys Val Ala		
385	390	395
Pro Leu Val Gln Ser Leu Cys Ala Lys His Gly Ile Glu Tyr Gln Ser		
405	410	415
Lys Pro Leu Leu Ser Ala Phe Ala Asp Ile Ile His Ser Leu Lys Glu		
420	425	430
Ser Gly Gln Leu Trp Leu Asp Ala Tyr Leu His Gln		
435	440	

<210> 3525

<211> 1116

<212> DNA

<213> Homo sapiens

<400> 3525

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 120
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 180

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 300
 agaaaagga tatgtgaata ccatttaaaa aactatgctg ctgctctaga aacttttata
 360
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 420
 gctcagaatg gctcagaatc tgagggtgtg atggaaccag ccctggaagg cacaggcaaa
 480
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 660
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 720
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 780
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 960
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 1020
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 1116

<210> 3526

<211> 304

<212> PRT

<213> Homo sapiens

<400> 3526

Ile	Thr	Asp	Glu	Lys	Arg	Ile	Phe	Phe	Tyr	Ile	Val	Ala	Val	Ala	Asp
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Ala	Lys	Lys	Ser	Arg	Glu	Phe	Asn	Pro	Asn	Asn	Ser	Thr	Ala	Val	Leu
			20					25					30		
Arg	Lys	Gly	Ile	Cys	Glu	Tyr	His	Leu	Lys	Asn	Tyr	Ala	Ala	Ala	Leu
		35					40					45			
Glu	Thr	Phe	Ile	Gly	Gly	Gln	Lys	Leu	Xaa	Ala	Asp	Ala	Asn	Phe	Ser
	50					55					60				
Asp	Trp	Ile	Lys	Arg	Cys	Gln	Glu	Ala	Gln	Asn	Gly	Ser	Glu	Ser	Glu
65				70						75				80	
Val	Val	Met	Glu	Pro	Ala	Leu	Glu	Gly	Thr	Gly	Lys	Glu	Gly	Lys	Lys
			85					90						95	
Ala	Ser	Ser	Arg	Lys	Arg	Thr	Leu	Ala	Glu	Pro	Pro	Ala	Lys	Gly	Leu
			100					105						110	
Leu	Gln	Pro	Val	Lys	Leu	Ser	Arg	Ala	Glu	Leu	Tyr	Lys	Glu	Pro	Thr

115	120	125
Asn Glu Glu Leu Asn Arg Leu Arg Glu Thr Glu Ile Leu Phe His Ser		
130	135	140
Ser Leu Leu Arg Leu Gln Val Glu Glu Leu Leu Lys Glu Val Arg Leu		
145	150	155
Ser Glu Lys Lys Lys Asp Arg Ile Asp Ala Phe Leu Arg Glu Val Asn		
165	170	175
Gln Arg Val Val Arg Val Pro Ser Val Pro Glu Thr Glu Leu Thr Asp		
180	185	190
Gln Ala Trp Leu Pro Ala Gly Val Arg Val Pro Leu His Gln Val Pro		
195	200	205
Tyr Ala Val Lys Gly Cys Phe Arg Phe Leu Pro Pro Ala Gln Val Thr		
210	215	220
Val Val Gly Ser Tyr Leu Leu Gly Thr Cys Ile Arg Pro Asp Ile Asn		
225	230	235
Val Asp Val Ala Leu Thr Met Pro Arg Glu Ile Leu Gln Asp Lys Asp		
245	250	255
Gly Leu Asn Gln Arg Tyr Phe Arg Lys Arg Ala Leu Tyr Leu Ala His		
260	265	270
Leu Ala His His Leu Ala Gln Asp Pro Leu Phe Gly Ser Val Cys Phe		
275	280	285
Ser Tyr Thr Asn Gly Cys His Leu Lys Pro Ser Leu Leu Leu Arg Pro		
290	295	300

<210> 3527

<211> 2838

<212> DNA

<213> Homo sapiens

<400> 3527

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720

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780
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1140
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 2820
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 2838

<210> 3528

<211> 281

<212> PRT

<213> Homo sapiens

<400> 3528

Gly	Gly	Thr	Gly	Leu	Gly	Arg	Asp	Glu	Asp	Pro	Val	Asp	Gln	Gly	Ser
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Leu	Phe	Phe	Ser	Cys	Ser	Pro	Arg	Gly	Pro	Pro	Gly	Pro	Arg	Gly	Arg
			20					25					30		
Pro	Gly	Pro	Pro	Gly	Pro	Pro	Gly	Gly	Pro	Ile	Gln	Leu	Gln	Gln	Asp
		35					40					45			
Asp	Leu	Gly	Ala	Ala	Phe	Gln	Thr	Trp	Met	Asp	Thr	Ser	Gly	Ala	Leu
	50					55					60				
Arg	Pro	Glu	Ser	Tyr	Ser	Tyr	Pro	Asp	Arg	Leu	Val	Leu	Asp	Gln	Gly
65				70					75					80	
Gly	Glu	Ile	Phe	Lys	Thr	Leu	His	Tyr	Leu	Ser	Asn	Leu	Ile	Gln	Ser
				85					90					95	
Ile	Lys	Thr	Pro	Leu	Gly	Thr	Lys	Glu	Asn	Pro	Ala	Arg	Val	Cys	Arg
			100					105						110	
Asp	Leu	Met	Asp	Cys	Glu	Gln	Lys	Met	Val	Asp	Gly	Thr	Tyr	Trp	Val
		115					120					125			
Asp	Pro	Asn	Leu	Gly	Cys	Ser	Ser	Asp	Thr	Ile	Glu	Val	Ser	Cys	Asn
		130				135					140				
Phe	Thr	His	Gly	Gly	Gln	Thr	Cys	Leu	Lys	Pro	Ile	Thr	Ala	Ser	Lys
145					150					155					160
Val	Glu	Phe	Ala	Ile	Ser	Arg	Val	Gln	Met	Asn	Phe	Leu	His	Leu	Leu
			165						170					175	
Ser	Ser	Glu	Val	Thr	Gln	His	Ile	Thr	Ile	His	Cys	Leu	Asn	Met	Thr
			180					185					190		
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Phe	Arg	Ala	Trp	Asn	Gly	Gln	Ile	Phe	Glu	Ala	Gly	Gly	Gln	Phe	Arg
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Gln Thr Leu Phe Thr Phe Arg Thr Gln Asp Pro Gln Gln Leu Pro Ile						
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<210> 3529

<211> 3026

<212> DNA

<213> Homo sapiens

<400> 3529

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<210> 3530

<211> 206

<212> PRT

<213> Homo sapiens

<400> 3530

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		20						25					30		
Cys	Xaa	Ser	Pro	Val	Ala	Gly	Val	Ala	His	Arg	Phe	His	Ser	Thr	Cys
		35					40					45			
Gly	Lys	Asn	Val	Thr	Leu	Glu	Glu	Asp	Gly	Thr	Arg	Ala	Val	Arg	Ala
	50					55				60					
Ala	Gly	Tyr	Ala	His	Gly	Leu	Val	Phe	Ser	Thr	Lys	Glu	Leu	Arg	Ala
65				70					75					80	
Glu	Glu	Val	Phe	Glu	Val	Lys	Val	Glu	Glu	Leu	Asp	Glu	Lys	Trp	Ala
			85					90					95		
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		100					105					110			
Pro	Gly	Ala	Gly	Gly	Gly	Gly	Pro	Gly	Leu	Pro	Pro	Ser	Leu	Pro	Glu
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Leu	Arg	Thr	Lys	Thr	Thr	Trp	Met	Val	Ser	Ser	Cys	Glu	Val	Arg	Arg
	130					135					140				
Asp	Gly	Gln	Leu	Gln	Arg	Met	Asn	Tyr	Gly	Arg	Asn	Leu	Glu	Arg	Leu
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Gly	Val	Lys	Trp	Leu	Ala	Pro	Gly	Thr	Gly	Glu	Gly	Leu	Gly	Val	Glu
			165					170					175		
Val	Ala	Gly	Arg	Gly	Gly	Leu	Asn	Ile	Val	Arg	Pro	Cys	Pro	Thr	Ser
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<210> 3531

<211> 879

<212> DNA

<213> Homo sapiens

<400> 3531

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<210> 3532

<211> 254

<212> PRT

<213> Homo sapiens

<400> 3532

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			20					25				30			
Ile	Val	Leu	Asn	Asn	Phe	Lys	Ser	Lys	Ile	Ile	Lys	Val	Lys	Val	Gln
		35				40					45				
Lys	Lys	Ala	Asp	Met	Val	Asn	Glu	Asp	Leu	Leu	Ser	Asp	Gly	Thr	Ser
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Glu	Asn	Glu	Ser	Gly	Phe	Trp	Asp	Ser	Phe	Lys	Trp	Gly	Phe	Thr	Gly
65					70					75				80	
Gln	Lys	Thr	Glu	Glu	Val	Lys	Gln	Asp	Lys	Asp	Asp	Ile	Ile	Asn	Ile
			85					90						95	
Phe	Ser	Val	Ala	Ser	Gly	His	Leu	Tyr	Glu	Arg	Phe	Leu	Arg	Ile	Met
		100						105					110		
Met	Leu	Ser	Val	Leu	Lys	Asn	Thr	Lys	Thr	Pro	Val	Lys	Phe	Trp	Phe
		115					120					125			
Leu	Lys	Asn	Tyr	Leu	Ser	Pro	Thr	Phe	Lys	Glu	Phe	Ile	Pro	Tyr	Met
		130				135					140				
Ala	Asn	Glu	Tyr	Asn	Phe	Gln	Tyr	Glu	Leu	Val	Gln	Tyr	Lys	Trp	Pro
145					150					155				160	
Arg	Trp	Leu	His	Gln	Gln	Thr	Glu	Lys	Gln	Arg	Ile	Ile	Trp	Gly	Tyr
			165					170					175		
Lys	Ile	Leu	Phe	Leu	Asp	Val	Leu	Phe	Pro	Leu	Val	Val	Asp	Lys	Phe

	180		185		190										
Leu	Phe	Val	Asp	Ala	Asp	Gln	Ile	Val	Arg	Thr	Asp	Leu	Lys	Glu	Leu
	195					200						205			
Arg	Asp	Phe	Asn	Leu	Asp	Gly	Ala	Pro	Tyr	Gly	Tyr	Thr	Pro	Phe	Cys
	210					215						220			
Asp	Ser	Arg	Arg	Glu	Met	Asp	Gly	Tyr	Arg	Phe	Trp	Lys	Ser	Gly	Tyr
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<210> 3533

<211> 1151

<212> DNA

<213> Homo sapiens

<400> 3533

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<211> 313

<212> PRT

<213> Homo sapiens

<400> 3534

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		20						25					30		
Met	Asp	Asn	Leu	Pro	Ser	Ala	Ala	Ser	Pro	Leu	Glu	Gln	Asn	Pro	Ser
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Lys	His	Gly	Ala	Ile	Pro	Gly	Gly	Leu	Ser	Ile	Gly	Pro	Pro	Gly	Lys
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Glu	Ser	Pro	Ala	Ser	Pro	Pro	Val	Ala	Val	Pro	His	Ser	Trp	Ser	Arg
				85					90					95	
Ala	Lys	Ser	Asp	Ser	Asp	Lys	Ile	Ser	Asn	Gly	Ser	Ser	Ile	Asn	Trp
			100						105					110	
Pro	Pro	Glu	Phe	His	Pro	Gly	Val	Pro	Trp	Lys	Gly	Leu	Gln	Asn	Ile
		115					120						125		
Asp	Pro	Glu	Asn	Asp	Pro	Asp	Val	Thr	Pro	Gly	Ser	Val	Pro	Thr	Gly
	130					135					140				
Pro	Thr	Ile	Asn	Thr	Thr	Ile	Gln	Asp	Val	Asn	Arg	Tyr	Leu	Leu	Lys
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			165						170					175	
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	195					200						205			
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	210					215					220				
His	Glu	Leu	Trp	Lys	Val	Pro	Arg	Asn	Ser	Thr	Ala	Pro	Thr	Arg	Pro
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Pro	Leu	Gly	Trp	Thr	Ser	Ser	Tyr	Ser	Ser	Gly	Ser	Ala	Trp	Ser	Thr
		260					265						270		
Asp	Thr	Ser	Gly	Arg	Thr	Ser	Ser	Trp	Leu	Val	Leu	Arg	Asn	Leu	Thr
	275						280					285			
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<211> 723

<212> DNA

<213> Homo sapiens

<400> 3535

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<210> 3536

<211> 163

<212> PRT

<213> Homo sapiens

<400> 3536

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			20					25					30		
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Cys	Ser	Ser	Lys	Leu	Asn	Met	Ser	Asn	Lys	Glu	Tyr	Lys	Phe	Tyr	Leu
	50				55					60					
His	Ser	Leu	Leu	Ser	Leu	Arg	Gln	Asp	Glu	Asp	Ser	Ser	Phe	Leu	Ser
65					70				75					80	
Gln	Asn	Glu	Thr	Glu	Asp	Ile	Leu	Ala	Phe	Thr	Arg	Gln	Tyr	Phe	Asp
			85					90					95		
Thr	Ser	Gln	Ser	Gln	Cys	Met	Glu	Thr	Lys	Thr	Leu	Gln	Lys	Lys	Ser
		100					105				110				
Gly	Ile	Val	Ser	Ser	Glu	Gly	Ala	Asn	Glu	Ser	Thr	Leu	Pro	Gln	Leu
	115					120					125				
Ala	Ala	Met	Ile	Ile	Thr	Leu	Ser	Leu	Gln	Gly	Val	Cys	Leu	Gly	Gln
	130				135				140						
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155

160

<210> 3537

<211> 714

<212> DNA

<213> Homo sapiens

<400> 3537

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<210> 3538

<211> 154

<212> PRT

<213> Homo sapiens

<400> 3538

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35           40           45
Gln Gly Val Ala Pro Gly Phe Arg His Ala Thr Thr Thr Arg Ala Arg
50           55           60
Ala Thr His Ala Ser Cys Ala His Leu Thr His Thr Pro Leu Pro Gly
65           70           75           80
His Ala Asp Thr Pro Gln Pro His Thr Ser His Ala Val His Leu Arg
85           90           95
Leu Leu Thr Ser His Ala Gln Cys Trp Cys Thr Phe Ala Ser His Met

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<210> 3539

<211> 818

<212> DNA

<213> Homo sapiens

<400> 3539

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<213> Homo sapiens

<400> 3540

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 His Pro Asp Tyr Arg Gln Asn Glu Ser His Asn Phe Ser Gly Asp Ile
 115 120 125
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<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

<400> 3542

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 50           55           60
His Phe Gln Cys Arg Arg Leu Asp Arg Ser Ala His Phe Ser Thr Leu
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Ala Ile Lys Gln Asn Pro Leu Leu Ala Glu Ala Tyr Ser Asn Leu Gly
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Asn Val Tyr Lys Glu Arg Gly Gln Leu Gln Glu Ala Ile Glu His Tyr
100           105           110
Arg His Ala Leu Arg Leu Lys Pro Asp Phe Ile Asp Gly Tyr Ile Asn
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<213> Homo sapiens

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<211> 3657

<212> DNA

<213> Homo sapiens

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<211> 792

<212> PRT

<213> Homo sapiens

<400> 3546

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Leu	Ala	Asp	Pro	Gly	Trp	Ala	Ser	Ile	Ser	Arg	Gly	Val	Leu	Val	Cys
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Val	His	Thr	Leu	Ala	Ser	Asn	Gly	Ala	Asn	Ser	Ile	Trp	Glu	His	Ser
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Lys Ala Gly Gln Thr	Leu Gln Ala Glu Leu Leu	Val Val Tyr Gly Ala
195	200	205
Asp Pro Gly Ser Pro	Asp Val Asn Gly Arg Thr	Pro Ile Asp Tyr Ala
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Arg Gln Ala Gly His	His Glu Leu Ala Glu Arg	Leu Val Glu Cys Gln
225	230	235
Tyr Glu Leu Thr Asp	Arg Leu Ala Phe Tyr	Leu Cys Gly Arg Lys Pro
245	250	255
Asp His Lys Asn Gly	His Tyr Ile Ile Pro	Gln Met Ala Asp Arg Ser
260	265	270
Arg Gln Lys Cys Met	Ser Gln Ser Leu Asp	Leu Ser Glu Leu Ala Lys
275	280	285
Ala Ala Lys Lys Lys	Leu Gln Ala Leu Ser	Asn Arg Leu Phe Glu Glu
290	295	300
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Ala Val Pro Phe Leu	Pro Val Asn Pro Glu	Tyr Ser Ala Thr Arg Asn
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Leu Ile Ile Asp Ile	Leu Ser Glu Ala Lys	Arg Arg Gln Gln Gly Lys
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Ser Leu Ser Ser Pro	Thr Asp Asn Leu Glu	Leu Ser Leu Arg Ser Gln
385	390	395
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Arg Ala Arg Ser Met	Asp Ser Ser Asp Leu	Ser Asp Gly Ala Val Thr
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Lys Val Gln Gln Leu	Met Lys Val Asn Ser	Ser Ser Asp Glu Leu
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Pro Leu Pro Ser Glu	Arg Ala Glu His Thr	Pro Met Ala Pro Gly Gly
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Ser Thr His Arg Arg	Asp Arg Gln Ala Phe	Ser Met Tyr Glu Pro Gly
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545	550	555
Arg Leu Gln Pro Phe	His Ser Thr Glu Leu	Glu Asp Asp Ala Ile Tyr

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<211> 1039

<212> DNA

<213> Homo sapiens

<400> 3547

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<211> 346

<212> PRT

<213> Homo sapiens

<400> 3548

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			20					25					30		
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Ser	Ser	Gly	Cys	Leu	Asn	Gly	Ser	Phe	Leu	Ala	Val	Ser	Asn	Asp	Asp
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His	Tyr	Arg	Thr	Gly	Thr	Arg	Phe	Ser	Gly	Val	Asp	Met	Asn	Ala	Ala
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Val	Glu	Leu	Phe	Lys	Glu	Val	Val	Val	His	Leu	Leu	Lys	Leu	Tyr	Lys
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<211> 2542

<212> DNA

<213> Homo sapiens

<400> 3549

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<211> 500

<212> PRT

<213> Homo sapiens

<400> 3550

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 50          55          60
Tyr Arg Arg Lys Glu Ile Leu Pro Phe Glu Lys Met Lys Glu Gln Arg
 65          70          75          80
Leu Arg Glu His Leu Val Arg Phe Glu Arg Leu Arg Arg Ala Met Glu
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100          105          110
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115          120          125
Glu Arg Glu Arg Leu Glu Ile Glu Arg Gln Lys Leu Glu Arg Glu Arg
130          135          140
Met Glu Arg Glu Arg Leu Glu Arg Glu Arg Ile Arg Ile Glu Gln Glu
145          150          155          160
Arg Arg Lys Glu Ala Glu Arg Ile Ala Arg Glu Arg Glu Glu Leu Arg
165          170          175
Arg Gln Gln Gln Gln Leu Arg Tyr Glu Gln Glu Lys Arg Asn Ser Leu
180          185          190
Lys Arg Pro Arg Asp Val Asp His Arg Arg Asp Asp Pro Tyr Trp Ser
195          200          205
Glu Asn Lys Lys Leu Ser Leu Asp Thr Asp Ala Arg Phe Gly His Gly
210          215          220
Ser Asp Tyr Ser Arg Gln Gln Asn Arg Phe Asn Asp Phe Asp His Arg
225          230          235          240
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245          250          255
Glu Arg Arg Asp Arg Phe Val Gly Gln Ser Glu Gly Lys Lys Ala Arg
260          265          270
Pro Thr Ala Arg Arg Glu Asp Pro Ser Phe Glu Arg Tyr Pro Lys Asn
275          280          285
Phe Ser Asp Ser Arg Arg Asn Glu Pro Pro Pro Pro Arg Asn Glu Leu
290          295          300
Arg Glu Ser Asp Arg Arg Glu Val Arg Gly Glu Arg Asp Glu Arg Arg
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Thr Val Ile Ile His Asp Arg Pro Asp Ile Thr His Pro Arg His Pro
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Arg Glu Ala Gly Pro Asn Pro Ser Arg Pro Thr Ser Trp Lys Ser Asp
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Glu Trp His Gly Pro Pro Ser Gln Gly Pro Ser Tyr His Asp Thr Arg				
	435		440	445
Arg Met Gly Asp Gly Arg Ala Gly Ala Gly Met Ile Thr Gln His Ser				
	450		455	460
Ser Asn Ala Ser Pro Ile Asn Arg Ile Val Gln Ile Ser Gly Asn Ser				
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 <213> Homo sapiens

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<211> 419

<212> PRT

<213> Homo sapiens

<400> 3554

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Asp	Glu	Ser	Leu	Gly	Pro	Ser	Asp	Leu	Glu	Leu	Arg	Glu	Leu	Lys	Glu
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Ser	Leu	Gln	Asp	Thr	Gln	Pro	Val	Gly	Val	Leu	Val	Asp	Cys	Cys	Lys
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		180						185					190		
Lys	Ala	Val	Ile	Ile	Val	Asn	Val	Phe	Arg	Glu	His	Arg	Gln	Thr	Ile
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		275					280					285			
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Ser	Gly	Cys	Pro	Leu	Pro	Glu	Ala	Cys	Glu	Leu	Tyr	Tyr	Val	Asn	Arg				
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Asp	Thr	Leu	Phe	Cys	Tyr	His	Lys	Ala	Ser	Glu	Val	Phe	Leu	Gln	Arg				
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<211> 1038

<212> DNA

<213> Homo sapiens

<400> 3555

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<211> 333

<212> PRT

<213> Homo sapiens

<400> 3556

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Gln	Arg	Arg	Phe	Ala	Lys	Gly	Val	Gln	Tyr	Asn	Met	Lys	Ile	Val	Ile	35	40	45	
Arg	Gly	Asp	Arg	Asn	Thr	Gly	Lys	Thr	Ala	Leu	Trp	His	Arg	Leu	Gln	50	55	60	
Gly	Arg	Pro	Phe	Val	Glu	Tyr	Ile	Pro	Thr	Gln	Glu	Ile	Gln	Val		65	70	75	80
Thr	Ser	Ile	His	Trp	Ser	Tyr	Lys	Thr	Thr	Asp	Asp	Ile	Val	Lys	Val	85	90	95	
Glu	Val	Trp	Asp	Val	Val	Asp	Lys	Gly	Lys	Cys	Lys	Lys	Arg	Gly	Asp	100	105	110	
Gly	Leu	Lys	Met	Glu	Asn	Asp	Pro	Gln	Glu	Ala	Glu	Ser	Glu	Met	Ala	115	120	125	
Leu	Asp	Ala	Glu	Phe	Leu	Asp	Val	Tyr	Lys	Asn	Cys	Asn	Gly	Val	Val	130	135	140	
Met	Met	Phe	Asp	Ile	Thr	Lys	Gln	Trp	Thr	Phe	Asn	Tyr	Ile	Leu	Arg	145	150	155	160
Glu	Leu	Pro	Lys	Val	Pro	Thr	His	Val	Pro	Val	Cys	Val	Leu	Gly	Asn	165	170	175	
Tyr	Arg	Asp	Met	Gly	Glu	His	Arg	Val	Ile	Xaa	Cys	Arg	Thr	Xaa	Val	180	185	190	
Arg	Asp	Phe	Ile	Asp	Asn	Leu	Asp	Arg	Pro	Pro	Gly	Ser	Ser	Tyr	Phe	195	200	205	
Arg	Tyr	Ala	Glu	Ser	Ser	Met	Lys	Asn	Ser	Phe	Gly	Leu	Lys	Tyr	Leu	210	215	220	
His	Lys	Phe	Phe	Asn	Ile	Pro	Phe	Leu	Gln	Leu	Gln	Arg	Glu	Thr	Leu	225	230	235	240
Leu	Arg	Gln	Leu	Glu	Thr	Asn	Gln	Leu	Asp	Met	Asp	Ala	Thr	Leu	Glu	245	250	255	
Glu	Leu	Ser	Val	Gln	Gln	Glu	Thr	Glu	Asp	Gln	Asn	Tyr	Gly	Ile	Phe	260	265	270	
Leu	Glu	Met	Met	Glu	Ala	Arg	Ser	Arg	Gly	His	Ala	Ser	Pro	Leu	Ala	275	280	285	
Ala	Asn	Gly	Gln	Ser	Pro	Ser	Pro	Gly	Ser	Gln	Ser	Pro	Val	Val	Pro	290	295	300	
Ala	Gly	Ala	Val	Ser	Thr	Gly	Ser	Ser	Ser	Pro	Gly	Thr	Ala	Gln	Pro	305	310	315	320
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<211> 486

<212> DNA

<213> Homo sapiens

<400> 3557

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240
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300
atttactacc caggttctca ggaatcagat agctcgcagt cggccaagaa ggacatgctg
360
gctgccttga agtccaggca ggaagctctg gaggaacccc tgcgtcagag gctggaggaa
420
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480
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486

<210> 3558

<211> 162

<212> PRT

<213> Homo sapiens

<400> 3558

Ser	Val	Thr	Arg	Arg	Thr	Phe	Gly	His	Ser	Gly	Ile	Ala	Val	His	Thr
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Trp	Tyr	Ala	Cys	Pro	Ala	Leu	Ile	Lys	Ser	Ile	Trp	Ala	Met	Ala	Ile
			20					25					30		
Ser	Gln	His	Gln	Phe	Tyr	Leu	Asp	Arg	Lys	Gln	Ser	Lys	Ser	Lys	Ile
		35					40					45			
His	Ala	Ala	Arg	Ser	Leu	Ser	Glu	Ile	Ala	Ile	Asp	Leu	Thr	Glu	Thr
		50				55					60				
Gly	Thr	Leu	Lys	Thr	Ser	Lys	Leu	Ala	Asn	Met	Gly	Ser	Lys	Gly	Lys
		65			70					75				80	
Ile	Ile	Ser	Gly	Ser	Ser	Gly	Ser	Leu	Leu	Ser	Ser	Gly	Ser	Gly	Ala
			85				90					95			
Arg	Arg	His	Cys	Ile	Leu	Leu	Pro	Gly	Ser	Gln	Glu	Ser	Asp	Ser	Ser
			100					105					110		
Gln	Ser	Ala	Lys	Lys	Asp	Met	Leu	Ala	Ala	Leu	Lys	Ser	Arg	Gln	Glu
		115					120					125			
Ala	Leu	Glu	Glu	Thr	Leu	Arg	Gln	Arg	Leu	Glu	Glu	Leu	Lys	Lys	Leu
		130				135					140				
Cys	Leu	Arg	Glu	Ala	Glu	Leu	Thr	Gly	Lys	Leu	Pro	Val	Glu	Tyr	Pro
		145			150					155				160	
Leu	Asp														

<210> 3559

<211> 673

<212> DNA

<213> Homo sapiens

<400> 3559

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 120
 gccggcgaag caggggctat cgagcgggtc ctgagggatt acagcgacaa gcatagggct
 180
 actttcaaat ttgaatcaac agatgaagat aaaagaaaga aactctgtga aggcataatt
 240
 aaagtcctta taaaggacat cccaacaaca tgtcaagtgt cctgcctgga agtactccgc
 300
 attctctcca gagacaaaaa gggttttagtt cctgtgacaa ctaaggaaaa tatgcagata
 360
 ctgctgcgac tagccaagct aaatgagtta gatgattctt tggagaaaagt atcagagttc
 420
 ccagttattg tggagtcatt aaaatgtctg tgtaatatag tgttcaacag tcagatggca
 480
 cagcagctca gcttgaact taatcttgcg gcaaagctct gtaacctcct gagaaagtgc
 540
 aaggaccgga aatttatcaa tgacattaag tgctttgact tgcgcttgct cttccttctg
 600
 tcacttttgc acaccgacat caggtcaciaa ttgcgctatg agctccaggg actaccgctg
 660
 ctaacgcaga tcg
 673

<210> 3560

<211> 195

<212> PRT

<213> Homo sapiens

<400> 3560

Met	Asp	Glu	Glu	Arg	Ala	Leu	Tyr	Ile	Val	Arg	Ala	Gly	Glu	Ala	Gly
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Ala	Ile	Glu	Arg	Val	Leu	Arg	Asp	Tyr	Ser	Asp	Lys	His	Arg	Ala	Thr
				20				25					30		
Phe	Lys	Phe	Glu	Ser	Thr	Asp	Glu	Asp	Lys	Arg	Lys	Lys	Leu	Cys	Glu
				35				40					45		
Gly	Ile	Phe	Lys	Val	Leu	Ile	Lys	Asp	Ile	Pro	Thr	Thr	Cys	Gln	Val
				50				55					60		
Ser	Cys	Leu	Glu	Val	Leu	Arg	Ile	Leu	Ser	Arg	Asp	Lys	Lys	Val	Leu
				65				70					75		80
Val	Pro	Val	Thr	Thr	Lys	Glu	Asn	Met	Gln	Ile	Leu	Leu	Arg	Leu	Ala
								85					90		95
Lys	Leu	Asn	Glu	Leu	Asp	Asp	Ser	Leu	Glu	Lys	Val	Ser	Glu	Phe	Pro
				100				105					110		
Val	Ile	Val	Glu	Ser	Leu	Lys	Cys	Leu	Cys	Asn	Ile	Val	Phe	Asn	Ser
				115				120					125		
Gln	Met	Ala	Gln	Gln	Leu	Ser	Leu	Glu	Leu	Asn	Leu	Ala	Ala	Lys	Leu
				130				135					140		
Cys	Asn	Leu	Leu	Arg	Lys	Cys	Lys	Asp	Arg	Lys	Phe	Ile	Asn	Asp	Ile

145 150 155 160
 Lys Cys Phe Asp Leu Arg Leu Leu Phe Leu Leu Ser Leu Leu His Thr
 165 170 175
 Asp Ile Arg Ser Gln Leu Arg Tyr Glu Leu Gln Gly Leu Pro Leu Leu
 180 185 190
 Thr Gln Ile
 195

<210> 3561

<211> 523

<212> DNA

<213> Homo sapiens

<400> 3561

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 120
 ggagggcatg agacgcctat tgcagagctg ctcaccagaa ggtcacagga atttagaaga
 180
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 240
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 300
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 360
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 420
 aagcggaggt ttggtgggtg tttctactt tgactttctca ttgcactaaa catacaactc
 480
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 523

<210> 3562

<211> 106

<212> PRT

<213> Homo sapiens

<400> 3562

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 20 25 30
 Leu His Val Asp Gly Leu Phe Arg Leu Asp Trp Leu Arg Thr Glu Glu
 35 40 45
 Met Glu Gly Trp Ala Gly Ser Gly Gly Val Gly Ser Gln Thr Asp Ser
 50 55 60
 Ala Trp Gly Leu Ala His Gly Val Glu Ala Glu Val Trp Trp Val Phe
 65 70 75 80
 Ser Thr Leu Thr Ser His Cys Thr Lys His Thr Thr Leu Gln Gly Asp
 85 90 95
 Gly Glu Glu Glu Trp Gly Lys Gly Val Cys
 100 105

<210> 3563

<211> 359

<212> DNA

<213> Homo sapiens

<400> 3563

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 120
 cccctgccgc cgtcgacggg gccccagtg ggcgcgggcc tggacgcgga gcagcgcacg
 180
 gtgttcgcct tcgtgctctg cctgctcgtg gtgctggtgc tgttgatggt gcgtgcgtg
 240
 cgcctcctgc tcgacccta cagccgcatg cccgcctcgt cctggaccga ccacaaggag
 300
 gcgctcgagc gcgggcagtt cgactacgcg ttggtgtgag ggcgcggcg cccctagg
 359

<210> 3564

<211> 82

<212> PRT

<213> Homo sapiens

<400> 3564

Met	Ser	Ala	Thr	Trp	Thr	Leu	Ser	Pro	Glu	Pro	Leu	Pro	Pro	Ser	Thr
1			5					10					15		
Gly	Pro	Pro	Val	Gly	Ala	Gly	Leu	Asp	Ala	Glu	Gln	Arg	Thr	Val	Phe
			20				25					30			
Ala	Phe	Val	Leu	Cys	Leu	Leu	Val	Val	Leu	Val	Leu	Leu	Met	Val	Arg
		35				40					45				
Cys	Val	Arg	Ile	Leu	Leu	Asp	Pro	Tyr	Ser	Arg	Met	Pro	Ala	Ser	Ser
	50				55					60					
Trp	Thr	Asp	His	Lys	Glu	Ala	Leu	Glu	Arg	Gly	Gln	Phe	Asp	Tyr	Ala
65					70				75					80	
Leu	Val														

<210> 3565

<211> 580

<212> DNA

<213> Homo sapiens

<400> 3565

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 cgtgagcagg cacaggagac cttccgcgcc gccggccggg cgaccccgca ggaagtagga
 120
 aggacgagcg cgcacttcaa gtcccagaag ccccggtttc ctggagcccg cgccgtgccg
 180
 cgctacgccc gccgggagcc gggcagagcg gccaatgt cgcagcccaa gaaaagaaag
 240
 cttgagtcgg ggggcggcgc cgaaggaggg gagggaaactg aagaggaaga tggcgcggag
 300

cgggaggcgg ccctggagcg accccggagc actaagcggg aacgggacca gctgtactac
 360
 gagtgctact cggacgtttc ggtccacgag gagatgatcg cggaccgcgt ccgcaccgat
 420
 gcctaccgct ggggtttccct tcggaactgg gcagcactgc gaggcaagac ggtactggac
 480
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 540
 tacgcggtag aggccagcgc catctggcaa caggcccggg
 580

<210> 3566

<211> 193

<212> PRT

<213> Homo sapiens

<400> 3566

Thr	Arg	Arg	Gly	Trp	Glu	Lys	Gly	Cys	Gln	Asp	Thr	Arg	Arg	Ala	Ile
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Gln	Asn	Ser	Ser	Arg	Glu	Gln	Ala	Gln	Glu	Thr	Phe	Arg	Ala	Ala	Gly
		20					25						30		
Arg	Ala	Thr	Pro	Gln	Glu	Val	Gly	Arg	Thr	Ser	Ala	His	Phe	Lys	Ser
		35				40						45			
Gln	Lys	Pro	Pro	Phe	Pro	Gly	Ala	Arg	Ala	Val	Pro	Arg	Tyr	Ala	Arg
	50					55					60				
Arg	Glu	Pro	Gly	Arg	Ala	Ala	Lys	Met	Ser	Gln	Pro	Lys	Lys	Arg	Lys
65				70					75					80	
Leu	Glu	Ser	Gly	Gly	Gly	Ala	Glu	Gly	Gly	Glu	Gly	Thr	Glu	Glu	Glu
			85					90						95	
Asp	Gly	Ala	Glu	Arg	Glu	Ala	Ala	Leu	Glu	Arg	Pro	Arg	Thr	Thr	Lys
		100					105						110		
Arg	Glu	Arg	Asp	Gln	Leu	Tyr	Tyr	Glu	Cys	Tyr	Ser	Asp	Val	Ser	Val
	115					120						125			
His	Glu	Glu	Met	Ile	Ala	Asp	Arg	Val	Arg	Thr	Asp	Ala	Tyr	Arg	Trp
	130					135						140			
Val	Ser	Leu	Arg	Asn	Trp	Ala	Ala	Leu	Arg	Gly	Lys	Thr	Val	Leu	Asp
145				150					155					160	
Val	Gly	Ala	Gly	Thr	Gly	Ile	Leu	Ser	Ile	Phe	Cys	Ala	Gln	Ala	Gly
		165				170							175		
Ala	Arg	Arg	Val	Tyr	Ala	Val	Glu	Ala	Ser	Ala	Ile	Trp	Gln	Gln	Ala
		180					185						190		

Arg

<210> 3567

<211> 2811

<212> DNA

<213> Homo sapiens

<400> 3567

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 120

ataagcaggt ggaagagatc ctccgtctgg agaaagaaat cgaggacctg cagcgcata
180
aggagcagca ggagctgtcg ctgaccgagg ctccctgca gaagctgcag gagcggcggg
240
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300
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360
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420
gaagaaagag aaagagagag agagcgaaga gaagccgagc tccgcgcca gcaggaagaa
480
gaaacgagga agcagcaaga actcgaagcc ttgcagaaga gccagaagga agctgaactg
540
acccgtgaac tggagaaaca gaaggaaaat aagcaggtgg aagagatcct ccgtctggag
600
aaagaaatcg aggacctgca gcgcataag gagcagcagg agctgtcgct gaccgaggct
660
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720
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960
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1020
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1080
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1740

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 2700
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<210> 3568

<211> 869

<212> PRT

<213> Homo sapiens

<400> 3568

Pro	Arg	Leu	Pro	Cys	Arg	Ser	Cys	Arg	Ser	Gly	Gly	Thr	Arg	Ser	Ser
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Ala	Gly	Trp	Arg	Arg	Arg	Phe	Leu	His	Leu	Lys	Lys	Ala	Ala	Ile	Val
			20					25					30		
Phe	Gln	Lys	Gln	Leu	Arg	Gly	Gln	Ile	Ala	Arg	Arg	Val	Tyr	Arg	Gln
		35					40					45			
Leu	Leu	Ala	Glu	Lys	Arg	Glu	Gln	Glu	Glu	Lys	Lys	Lys	Gln	Glu	Glu
	50						55				60				
Glu	Glu	Lys	Lys	Lys	Arg	Glu	Glu	Glu	Glu	Arg	Glu	Arg	Glu	Arg	Glu
65				70						75				80	
Arg	Arg	Glu	Ala	Glu	Leu	Arg	Ala	Gln	Gln	Glu	Glu	Glu	Thr	Arg	Lys

2726

515	520	525
Ile Ala Glu Ser Pro Glu Asp	Ala Ser Gln Trp Phe Ser Val Leu Ser	
530	535	540
Gln Val His Ala Ser Thr Asp	Gln Glu Ile Gln Glu Met His Asp Glu	
545	550	555
Gln Ala Asn Pro Gln Asn Ala Val Gly Thr	Leu Asp Val Gly Leu Ile	
565	570	575
Asp Ser Val Cys Ala Ser Asp Ser Pro Asp Arg	Pro Asn Ser Phe Val	
580	585	590
Ile Ile Thr Ala Asn Arg Val Leu His Cys Asn Ala Asp Thr Pro Glu		
595	600	605
Glu Met His His Trp Ile Thr Leu Leu Gln Arg Ser Lys Gly Asp Thr		
610	615	620
Arg Val Glu Gly Gln Glu Phe Ile Val Arg Gly Trp Leu His Lys Glu		
625	630	635
Val Lys Asn Ser Pro Lys Met Ser Ser Leu Lys Leu Lys Lys Arg Trp		
645	650	655
Phe Val Leu Thr His Asn Ser Leu Asp Tyr Tyr Lys Ser Ser Glu Lys		
660	665	670
Asn Ala Leu Lys Leu Gly Thr Leu Val Leu Asn Ser Leu Cys Ser Val		
675	680	685
Val Pro Pro Asp Glu Lys Ile Phe Lys Glu Thr Gly Tyr Trp Asn Val		
690	695	700
Thr Val Tyr Gly Arg Lys His Cys Tyr Arg Leu Tyr Thr Lys Leu Leu		
705	710	715
Asn Glu Ala Thr Arg Trp Ser Ser Val Ser Gln Asn Val Thr Asp Thr		
725	730	735
Lys Ala Pro Ile Asp Thr Pro Thr Gln Gln Leu Ile Gln Asp Ile Lys		
740	745	750
Glu Asn Cys Leu Asn Ser Asp Val Val Glu Gln Ile Tyr Lys Arg Asn		
755	760	765
Pro Ile Leu Arg Tyr Thr His His Pro Leu His Ser Pro Leu Leu Pro		
770	775	780
Leu Pro Tyr Gly Asp Ile Asn Leu Asn Leu Leu Lys Asp Lys Gly Tyr		
785	790	795
Thr Thr Leu Gln Asp Glu Ala Ile Lys Ile Phe Asn Ser Leu Gln Gln		
805	810	815
Leu Glu Ser Met Ser Asp Pro Ile Pro Ile Ile Gln Gly Ile Leu Gln		
820	825	830
Thr Gly His Asp Leu Arg Pro Leu Arg Asp Glu Leu Tyr Cys Gln Leu		
835	840	845
Ile Lys Gln Thr Asn Lys Val Pro His Pro Gly Ser Val Gly Asn Leu		
850	855	860
Tyr Ser Trp Gln Ile		
865		

<210> 3569

<211> 5070

<212> DNA

<213> Homo sapiens

<400> 3569

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120
ccccagggtc cgctctcccc gggccctggg tccttgctc tcagcattgc ccgtgtccag
180
acaccgcctt ggcaccgcc aggtgcccc tccccaggcc tcctgcagga cagtgcagc
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420
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720
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1260
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1380
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1620
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1980
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<211> 893

<212> PRT

<213> Homo sapiens

<400> 3570

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Arg	Ala	Pro	Ser	Pro	Pro	Trp	Pro	Pro	Gln	Gly	Pro	Leu	Ser	Pro	Gly
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Pro	Gly	Ser	Leu	Pro	Leu	Ser	Ile	Ala	Arg	Val	Gln	Thr	Pro	Pro	Trp
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Leu	Ser	Gly	Ser	Tyr	Leu	Asp	Pro	Asn	Tyr	Gln	Ser	Ile	Lys	Trp	Gln
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Glu	Leu	Pro	Met	Leu	Thr	Tyr	Arg	Val	Asp	Ala	Asp	Lys	Gly	Phe	Asn
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Phe	Ser	Val	Gly	Asp	Asp	Ala	Phe	Val	Cys	Gln	Lys	Lys	Asn	His	Phe
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Gln	Val	Thr	Val	Tyr	Ile	Gly	Met	Leu	Gly	Glu	Pro	Lys	Tyr	Val	Lys
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Thr	Pro	Glu	Gly	Leu	Lys	Pro	Leu	Asp	Cys	Phe	Tyr	Leu	Lys	Leu	His
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Gly	Val	Lys	Leu	Glu	Ala	Leu	Asn	Gln	Ser	Ile	Asn	Ile	Glu	Gln	Ser
		180					185					190			
Gln	Ser	Asp	Arg	Ser	Lys	Arg	Pro	Phe	Asn	Pro	Val	Thr	Val	Asn	Leu
		195				200					205				
Pro	Pro	Glu	Gln	Val	Thr	Lys	Val	Thr	Val	Gly	Arg	Leu	His	Phe	Ser
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225				230						235				240	
Gln	Arg	Tyr	Phe	Met	Leu	Val	Val	Ala	Leu	Gln	Ala	His	Ala	Gln	Asn
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Gln	Asn	Tyr	Thr	Leu	Ala	Ala	Gln	Ile	Ser	Glu	Arg	Ile	Ile	Val	Arg
		260					265					270			
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		275					280				285				
Arg	Ala	Gln	Val	Pro	Asp	Thr	Val	Phe	His	His	Gly	Arg	Val	Gly	Ile
		290				295					300				
Asn	Thr	Asp	Arg	Pro	Asp	Glu	Ala	Leu	Val	Val	His	Gly	Asn	Val	Lys
305				310					315					320	
Val	Met	Gly	Ser	Leu	Met	His	Pro	Ser	Asp	Leu	Arg	Ala	Lys	Glu	His
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Val	Gln	Glu	Val	Asp	Thr	Thr	Glu	Gln	Leu	Lys	Arg	Ile	Ser	Arg	Met

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 Ile Glu Ala Thr Ala Pro Glu Thr Gly Val Ile Ala Gln Glu Val Lys
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 Glu Ile Leu Pro Glu Ala Val Lys Asp Thr Gly Asp Met Val Phe Ala
 385 390 395 400
 Asn Gly Lys Thr Ile Glu Asn Phe Leu Val Val Asn Lys Glu Arg Ile
 405 410 415
 Phe Met Glu Asn Val Gly Ala Val Lys Glu Leu Cys Lys Leu Thr Asp
 420 425 430
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 Ala Lys Leu Arg Arg Leu Asp Ser Leu Lys Ser Thr Gly Ser Ser Gly
 450 455 460
 Ala Phe Ser His Ala Gly Ser Gln Phe Ser Arg Ala Gly Ser Val Pro
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 His Lys Lys Arg Pro Pro Lys Val Ala Ser Lys Ser Ser Val Val
 485 490 495
 Pro Asp Gln Ala Cys Ile Ser Gln Arg Phe Leu Gln Gly Thr Ile Ile
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 Ala Leu Val Val Val Met Ala Phe Ser Val Val Ser Met Ser Thr Leu
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 Tyr Val Leu Ser Leu Arg Thr Glu Glu Asp Leu Val Asp Thr Asp Gly
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 Pro Pro Gly Gly Ser Glu Ala Leu Cys Pro Trp Ser Ser Gln Ser Phe
 565 570 575
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 Pro Ala Glu Pro Thr Trp Ala Gln Gly Gln Ser Ala Ser Leu Leu Ala
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 755 760 765
 Ser Ile Thr Ser Gln Tyr Cys Ala Pro Gly Asp Ala Cys Arg Pro Gly

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785              790              795              800
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Cys Ser Leu Arg Ser Lys Glu Glu Pro Cys Glu Glu Gly Ser Leu Pro
      820              825              830
Gln Ser Leu His Thr His Gln Asp Thr Gln Gly Thr Ser His Arg Trp
      835              840              845
Pro Ile Thr Ile Leu Ser Phe Arg Glu Phe Thr Tyr His Phe Arg Val
      850              855              860
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<210> 3571

<211> 528

<212> DNA

<213> Homo sapiens

<400> 3571

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420
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<211> 110

<212> PRT

<213> Homo sapiens

<400> 3572

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Ser Tyr Phe Leu Phe Val Ile Phe Thr Ala Tyr Ala Met Leu Pro Leu
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<211> 361

<212> PRT

<213> Homo sapiens

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			20					25					30		
Ile	Asn	Pro	Ser	His	Thr	His	Ser	Pro	Ile	Phe	Ser	Ile	His	Ser	Gly
	35						40					45			
Thr	Cys	Val	Phe	Asn	Lys	Pro	Gly	Gly	His	Thr	Ala	Ser	His	Thr	His
	50					55				60					
Thr	Leu	Thr	Ala	Thr	Asn	Pro	Arg	Ser	His	Ala	His	Ala	Asp	Ala	Pro
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Cys	Gly	Thr	Cys	Thr	His	Asn	His	Thr	Cys	Val	Gln	Ser	Gly	Arg	His
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Thr	His	Thr	Cys	Ile	Glu	Ala	Ser	Leu	Trp	Thr	Pro	Ser	Ala	Ser	His
			100					105					110		
Arg	Gly	Gly	Ser	Pro	Ala	Val	Phe	Asp	Trp	Phe	Phe	Glu	Ala	Ala	Cys
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Pro	Ala	Ser	Val	Gln	Glu	Asp	Pro	Pro	Ile	Leu	Arg	Gln	Phe	Pro	Pro
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Asp	Phe	Arg	Asp	Gln	Glu	Ala	Met	Gln	Met	Val	Pro	Lys	Phe	Cys	Phe
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Pro	Phe	Asp	Val	Glu	Arg	Gly	Pro	Pro	Ser	Pro	Ala	Val	Gln	His	Phe
				165				170						175	
Thr	Phe	Ala	Leu	Thr	Asp	Leu	Ala	Gly	Asn	Arg	Arg	Phe	Gly	Phe	Cys
			180					185					190		
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	195					200						205			
Pro	Trp	Phe	Glu	Val	Phe	Tyr	Lys	Leu	Leu	Asn	Thr	Val	Gly	Asp	Leu
	210					215					220				
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225					230					235					240
Phe	Gln	Gln	Ser	Leu	Ser	Gly	Pro	Gln	Ala	Ser	Val	Gly	Leu	Glu	Leu
				245					250					255	
Gly	Ser	Gly	Val	Thr	Val	Ser	Ser	Gly	Gln	Gly	Ile	Pro	Pro	Pro	Thr
			260					265					270		
Arg	Gly	Asn	Ser	Lys	Pro	Leu	Ser	Cys	Phe	Val	Ala	Pro	Asp	Ser	Gly
	275						280					285			
Arg	Leu	Pro	Ser	Ile	Pro	Glu	Asn	Arg	Asn	Leu	Thr	Glu	Leu	Val	Val
	290					295					300				
Ala	Val	Thr	Asp	Glu	Asn	Ile	Val	Gly	Leu	Phe	Ala	Ala	Leu	Leu	Ala
305					310					315					320
Glu	Arg	Arg	Val	Leu	Leu	Thr	Ala	Ser	Lys	Leu	Ser	Thr	Leu	Arg	Arg
				325					330					335	
Gly	Pro	Pro	Gly	Arg	Gly	Gly	Ser	Arg	Ala	Trp	Leu	Arg	Pro	Gly	Gly
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 <211> 769
 <212> DNA
 <213> Homo sapiens

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<210> 3576
 <211> 205
 <212> PRT
 <213> Homo sapiens

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 Ser Thr Thr Lys Gln Asp Lys Ile Ile Ser Phe Ile Phe Ala Leu Thr
 35 40 45
 Ile Pro Lys Met Met Phe Leu Pro Asn Glu Cys Leu His Phe Ile Phe
 50 55 60
 Gln Thr Cys Ser Leu Lys Pro Ile Ile Ala Pro Leu Arg Asn Ile Phe
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 Ser Pro Lys Ile Thr Pro His Thr Ser Pro Ala Pro Arg Arg Arg Ser

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1020

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<210> 3578

<211> 195

<212> PRT

<213> Homo sapiens

<400> 3578

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		20					25						30		
Ile	Ser	Glu	His	Phe	His	Pro	Thr	Val	Ile	Gly	Glu	Ser	Met	Tyr	Gly
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Asp	Phe	Glu	Glu	Ala	Phe	Asp	His	Leu	Gln	Asn	Arg	Leu	Ile	Ala	Thr
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Lys	Asn	Pro	Glu	Glu	Ile	Arg	Gly	Gly	Gly	Leu	Leu	Lys	Tyr	Ser	Asn
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Leu	Leu	Val	Arg	Asp	Phe	Arg	Pro	Thr	Asp	Gln	Glu	Glu	Ile	Lys	Thr
			85					90					95		
Leu	Glu	Arg	Tyr	Met	Cys	Ser	Arg	Phe	Phe	Ile	Asp	Phe	Pro	Asp	Ile
		100					105						110		
Leu	Glu	Gln	Gln	Arg	Lys	Leu	Glu	Thr	Tyr	Leu	Gln	Asn	His	Phe	Ala
		115					120					125			
Glu	Glu	Glu	Arg	Ser	Lys	Tyr	Asp	Tyr	Leu	Met	Ile	Leu	Arg	Arg	Val
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Val	Asn	Glu	Ser	Thr	Val	Cys	Leu	Met	Gly	His	Glu	Arg	Arg	Gln	Thr
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Leu	Asn	Leu	Ile	Ser	Leu	Leu	Ala	Leu	Arg	Val	Leu	Gly	Gly	Thr	Lys
			165					170					175		
His	His	Pro	Pro	Val	Pro	Pro	Arg	Ser	Pro	Val	Thr	Thr	Ser	Gly	Pro
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Leu	Ser	Gln													
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<210> 3579

<211> 755

<212> DNA

<213> Homo sapiens

<400> 3579

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<210> 3580

<211> 121

<212> PRT

<213> Homo sapiens

<400> 3580

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Ile	Cys	Ile	Trp	Ser	Ile	Ala	Arg	Leu	Ser	His	Leu	Ser	Ser	Asp	Gln
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Lys	Cys	Ile	Ser	Lys	Ile	Ile	Thr	Ser	Thr	Lys	Thr	Ile	Ile	Asp	Cys
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<210> 3581

<211> 2132

<212> DNA

<213> Homo sapiens

<400> 3581

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<211> 138

<212> PRT

<213> Homo sapiens

<400> 3582

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<210> 3583

<211> 1554

<212> DNA

<213> Homo sapiens

<400> 3583

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<210> 3584

<211> 356

<212> PRT

<213> Homo sapiens

<400> 3584

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Gln Glu Gly Asp Leu Pro Glu Leu Arg Arg Leu Leu Glu Pro His Glu					
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Leu Lys Arg Asp Gln Glu Gly Leu Gly Tyr Arg Ser Ala Pro Gln Pro					
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Arg Val Thr His Phe Pro Ala Trp Asp Thr Arg Ala Val Ala Gly Arg					
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<211> 2782

<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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2746

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<212> DNA

<213> Homo sapiens

<400> 3587

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<210> 3588

<211> 499

<212> PRT

<213> Homo sapiens

<400> 3588

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Glu Asp Val Gln Glu Glu Thr Gln Leu Asp Leu Ser Gly Asp Ser Val
35 40 45
Lys Thr Ile Ala Lys Leu Trp Asp Ser Lys Met Phe Ala Glu Ile Met
50 55 60
Met Lys Ile Glu Glu Tyr Ile Ser Lys Gln Ala Lys Ala Ser Glu Val
65 70 75 80
Met Gly Pro Val Glu Ala Ala Pro Glu Tyr Arg Val Ile Val Asp Ala
85 90 95
Asn Asn Leu Thr Val Glu Ile Glu Asn Glu Leu Asn Ile Ile His Lys
100 105 110
Phe Ile Arg Asp Lys Tyr Ser Lys Arg Phe Pro Glu Leu Glu Ser Leu
115 120 125
Val Pro Asn Ala Leu Asp Tyr Ile Arg Thr Val Lys Glu Leu Gly Asn
130 135 140
Ser Leu Asp Lys Cys Lys Asn Asn Glu Asn Leu Gln Gln Ile Leu Thr
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<210> 3589
<211> 675
<212> DNA
<213> Homo sapiens
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<210> 3590

<211> 117

<212> PRT

<213> Homo sapiens

<400> 3590

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			20					25					30		
Asp	Pro	Met	Ser	Pro	Phe	His	Leu	Ser	Ser	Val	Ile	Leu	Cys	Arg	Pro
		35					40					45			
Ser	Ala	Trp	Pro	Cys	Leu	Arg	Ser	Ser	Ser	Pro	Pro	Ala	Ala	Gln	Gly
		50				55					60				
Ser	Phe	Val	Ser	Ala	Gln	Glu	Gly	Pro	Tyr	Asn	Pro	Ser	Trp	Leu	Trp
65					70				75					80	
Pro	Gly	Pro	Cys	Phe	Val	Ser	Glu	Leu	Gly	Gly	Pro	Ile	Pro	Lys	His
				85					90					95	
Trp	Leu	Gly	Asn	Ser	Tyr	Pro	Ile	Cys	Cys	Leu	Gly	Ser	Ala	Trp	Phe
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Phe	Thr	His	Ile	Ser											
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<210> 3591

<211> 669

<212> DNA

<213> Homo sapiens

<400> 3591

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<210> 3592

<211> 223

<212> PRT

<213> Homo sapiens

<400> 3592

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		20						25					30		
Lys	Gln	Val	Asn	Trp	Lys	Ala	Cys	Arg	Trp	Ser	Ser	Ser	Gly	Val	Ile
		35					40					45			
Pro	Asn	Glu	Lys	Ile	Arg	Asn	Ile	Gly	Ile	Ser	Ala	His	Ile	Asp	Ser
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Gly	Lys	Thr	Thr	Leu	Thr	Glu	Arg	Val	Leu	Tyr	Tyr	Thr	Gly	Arg	Ile
65				70					75					80	
Ala	Lys	Met	His	Glu	Val	Lys	Gly	Lys	Asp	Gly	Val	Gly	Ala	Val	Met
			85						90					95	
Asp	Ser	Met	Glu	Leu	Glu	Arg	Gln	Arg	Gly	Ile	Thr	Ile	Gln	Ser	Ala
		100						105					110		
Ala	Thr	Tyr	Thr	Met	Trp	Lys	Asp	Val	Asn	Ile	Asn	Ile	Ile	Asp	Thr
	115					120						125			
Pro	Gly	His	Val	Asp	Phe	Thr	Ile	Glu	Val	Glu	Arg	Ala	Leu	Arg	Val
	130				135						140				
Leu	Asp	Gly	Ala	Val	Leu	Val	Leu	Cys	Ala	Val	Gly	Gly	Val	Gln	Cys
145				150					155					160	
Gln	Thr	Met	Thr	Val	Asn	Arg	Gln	Met	Lys	Arg	Tyr	Asn	Val	Pro	Phe
			165					170						175	
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		180					185						190		
Ala	Leu	Gln	Gln	Met	Arg	Ser	Lys	Leu	Asn	His	Asn	Ala	Ala	Phe	Met
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<210> 3593
 <211> 1005
 <212> DNA
 <213> Homo sapiens

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 240
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 360
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 420
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<210> 3594
 <211> 282
 <212> PRT
 <213> Homo sapiens

<400> 3594
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 35 40 45
 Arg Leu Leu Gly Ala Leu Cys Leu Gln Arg Pro Pro Val Val Ser Lys

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65              70              75              80
Glu Ile Glu Arg Ser Leu Tyr Ser Asp His Glu Leu Arg Ala Leu Asp
      85              90              95
Glu Asn Gln Arg Leu Ala Lys Lys Lys Ala Asp Leu His Asp Glu Glu
      100             105             110
Asp Glu Gln Asp Ile Leu Leu Ala Gln Asp Leu Glu Asp Met Trp Glu
      115             120             125
Gln Lys Phe Leu Gln Phe Lys Leu Gly Ala Arg Ile Thr Glu Ala Asp
      130             135             140
Glu Lys Asn Asp Arg Thr Ser Leu Asn Arg Lys Leu Asp Arg Asn Leu
145             150             155             160
Val Leu Leu Val Arg Glu Lys Phe Gly Asp Gln Asp Val Trp Ile Leu
      165             170             175
Pro Gln Ala Glu Trp Gln Pro Gly Glu Thr Leu Arg Gly Thr Ala Glu
      180             185             190
Arg Thr Leu Ala Thr Leu Ser Glu Asn Asn Met Glu Ala Lys Phe Leu
      195             200             205
Gly Asn Ala Pro Cys Gly His Tyr Thr Phe Lys Phe Pro Gln Ala Met
      210             215             220
Arg Thr Glu Ser Asn Leu Gly Ala Lys Val Phe Phe Phe Lys Ala Leu
225             230             235             240
Leu Leu Thr Gly Asp Phe Ser Gln Ala Gly Asn Lys Gly His His Val
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<210> 3595

<211> 1903

<212> DNA

<213> Homo sapiens

<400> 3595

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<210> 3596

<211> 496

<212> PRT

<213> Homo sapiens

<400> 3596

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Gln Met Leu	Ala Gln Tyr	Ile Glu Ser Phe Thr	Gln Gly Ser Ile Glu
	35	40	45
Ala His Lys	Arg Gly Ser Arg	Phe Trp Ile Gln	Asp Lys Gly Pro Ile
	50	55	60
Val Glu Ser	Tyr Ile Gly Phe	Ile Glu Ser Tyr	Arg Asp Pro Phe Gly
65	70	75	80
Ser Arg Gly	Glu Phe Glu Gly	Phe Val Ala Val	Val Asn Lys Ala Met
	85	90	95
Ser Ala Lys	Phe Glu Arg Leu	Val Ala Ser Ala	Glu Gln Leu Leu Lys
	100	105	110
Glu Leu Pro	Trp Pro Pro Thr	Phe Glu Lys Asp	Lys Phe Leu Thr Pro
	115	120	125
Asp Phe Thr	Ser Leu Asp Val	Leu Thr Phe Ala	Gly Ser Gly Ile Pro
	130	135	140
Ala Gly Ile	Asn Ile Pro Asn	Tyr Asp Asp Leu	Arg Gln Thr Glu Gly
145	150	155	160
Phe Lys Asn	Val Ser Leu Gly	Asn Val Leu Ala	Val Ala Tyr Ala Thr
	165	170	175
Gln Arg Glu	Lys Leu Thr Phe	Leu Glu Glu Asp	Asp Lys Asp Leu Tyr
	180	185	190
Ile Leu Trp	Lys Gly Pro Ser	Phe Asp Val Gln	Val Gly Leu His Glu
	195	200	205
Leu Leu Gly	His Gly Ser Gly	Lys Leu Phe Val	Gln Asp Glu Lys Gly
	210	215	220
Ala Phe Asn	Phe Asp Gln Glu	Thr Val Ile Asn	Pro Glu Thr Gly Glu
225	230	235	240
Gln Ile Gln	Ser Trp Tyr Arg	Ser Gly Glu Thr	Trp Asp Ser Lys Phe
	245	250	255
Ser Thr Ile	Ala Ser Ser Tyr	Glu Glu Cys Arg	Ala Glu Ser Val Gly
	260	265	270
Leu Tyr Leu	Cys Leu His Pro	Gln Val Leu Glu	Ile Phe Gly Phe Glu
	275	280	285
Gly Ala Asp	Ala Glu Asp Val	Ile Tyr Val Asn	Trp Leu Asn Met Val
	290	295	300
Arg Ala Gly	Leu Leu Ala Leu	Glu Phe Tyr Thr	Pro Glu Ala Phe Asn
305	310	315	320
Trp Arg Gln	Ala His Met Gln	Ala Arg Phe Val	Ile Leu Arg Val Leu
	325	330	335
Leu Glu Ala	Gly Glu Gly Leu	Val Thr Ile Thr	Pro Thr Thr Gly Ser
	340	345	350
Asp Gly Arg	Pro Asp Ala Arg	Val Arg Leu Asp	Arg Ser Lys Ile Arg
	355	360	365
Ser Val Gly	Lys Pro Ala Leu	Glu Arg Phe Leu	Arg Arg Leu Gln Val
	370	375	380
Leu Lys Ser	Thr Gly Asp Val	Ala Gly Gly Arg	Ala Leu Tyr Glu Gly
385	390	395	400
Tyr Ala Thr	Val Thr Asp Ala	Pro Pro Glu Cys	Phe Leu Thr Leu Arg
	405	410	415
Asp Thr Val	Leu Leu Arg Lys	Glu Ser Arg Lys	Leu Ile Val Gln Pro
	420	425	430
Asn Thr Arg	Leu Glu Gly Asn	Gly Ser Asp Val	Gln Leu Leu Glu Tyr

	435		440		445	
Glu	Ala	Ser	Ala	Ala	Gly	Leu
	450		455		460	
Glu	Asp	Gly	Pro	Glu	Leu	Glu
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Asp	Ala	Arg	Phe	Trp	Lys	Gly
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<210> 3597

<211> 1090

<212> DNA

<213> Homo sapiens

<400> 3597

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480
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1090

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<210> 3598

<211> 159
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Pro Lys Thr Ala Leu Pro Phe Asn Arg Phe Leu Pro Asn Lys Ser Arg
 50 55 60
 Gln Pro Ser Tyr Val Pro Ala Pro Leu Arg Lys Lys Lys Pro Asp Lys
 65 70 75 80
 His Glu Asp Asn Arg Arg Ser Trp Ala Ser Pro Val Tyr Thr Glu Ala
 85 90 95
 Asp Gly Thr Phe Ser Arg Ser Lys Ser Met Ser Asp Val Ser Ala Glu
 100 105 110
 Asp Val Gln Asn Leu Arg Gln Leu Arg Tyr Glu Glu Met Gln Lys Ile
 115 120 125
 Lys Ser Gln Leu Lys Glu Gln Asp Gln Lys Trp Gln Asp Asp Leu Ala
 130 135 140
 Lys Trp Lys Asp Arg Arg Lys Ser Tyr Thr Ser Asp Leu Gln Lys
 145 150 155

<210> 3599
 <211> 691
 <212> DNA
 <213> Homo sapiens

<400> 3599
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691

<210> 3600
<211> 98
<212> PRT
<213> Homo sapiens

<400> 3600
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Met Val Glu Val Arg Ser Trp Ser Gly Ser Leu Val Gly Trp Leu Ala
35 40 45
Pro Arg Pro Leu Ser Val Pro Ile Glu His Leu Leu Gly Ala Lys Asn
50 55 60
Cys Cys Arg His Gly Gly Gln Trp Val Arg Arg Ala Val Pro Ala Val
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Leu Leu

<210> 3601
<211> 2963
<212> DNA
<213> Homo sapiens

<400> 3601
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 2940
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 2963

<210> 3602

<211> 299

<212> PRT

<213> Homo sapiens

<400> 3602

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		20					25						30		
Glu	Ala	Arg	Glu	Leu	Met	Tyr	Ser	Gly	Ala	Leu	Leu	Phe	Ser	His	
	35					40					45				
Gly	Gln	Gln	Asn	Ser	Ala	Ala	Asp	Leu	Ser	Met	Leu	Val	Leu	Glu	Ser
	50				55					60					
Leu	Glu	Lys	Ala	Glu	Val	Glu	Val	Ala	Asp	Glu	Leu	Leu	Glu	Asn	Leu
65				70				75					80		
Ala	Lys	Val	Phe	Ser	Leu	Met	Asp	Pro	Asn	Ser	Pro	Glu	Arg	Val	Thr
			85				90						95		
Phe	Val	Ser	Arg	Ala	Leu	Lys	Trp	Ser	Ser	Gly	Gly	Ser	Gly	Lys	Leu
		100					105						110		
Gly	His	Pro	Arg	Leu	His	Gln	Leu	Leu	Ala	Leu	Thr	Leu	Trp	Lys	Glu
	115					120					125				
Gln	Asn	Tyr	Cys	Glu	Ser	Arg	Tyr	His	Phe	Leu	His	Ser	Ala	Asp	Gly
	130				135					140					
Glu	Gly	Cys	Ala	Asn	Met	Leu	Val	Glu	Tyr	Ser	Thr	Ser	Arg	Gly	Phe
145				150				155					160		
Arg	Ser	Glu	Val	Asp	Met	Phe	Val	Ala	Gln	Ala	Val	Leu	Gln	Phe	Leu
			165				170						175		
Cys	Leu	Lys	Asn	Lys	Ser	Ser	Ala	Ser	Val	Val	Phe	Thr	Thr	Tyr	Thr
		180					185					190			
Gln	Lys	His	Pro	Ser	Ile	Glu	Asp	Gly	Pro	Pro	Phe	Val	Glu	Pro	Leu

195 200 205
 Leu Asn Phe Ile Trp Phe Leu Leu Leu Ala Val Asp Gly Gly Lys Leu
 210 215 220
 Thr Val Phe Thr Val Leu Cys Glu Gln Tyr Gln Pro Ser Leu Arg Arg
 225 230 235 240
 Asp Pro Met Tyr Asn Glu Tyr Leu Asp Arg Ile Gly Gln Leu Phe Phe
 245 250 255
 Gly Val Pro Pro Lys Gln Thr Ser Ser Tyr Gly Gly Leu Leu Gly Asn
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 275 280 285
 Ser Pro Ser Asp Gly Ser Pro Ile Glu Leu Asp
 290 295

<210> 3603

<211> 1082

<212> DNA

<213> Homo sapiens

<400> 3603

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 240
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 780
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 960
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 1020

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1080

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1082

<210> 3604

<211> 146

<212> PRT

<213> Homo sapiens

<400> 3604

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			20					25					30		
Val	Ala	Ala	Gln	Glu	Glu	Pro	Asp	Lys	Glu	Gly	Lys	Glu	Lys	Pro	His
		35				40					45				
Ala	Gly	Val	Ser	Pro	Arg	Gly	Val	Lys	Arg	Gln	Arg	Arg	Ser	Ser	Ser
	50					55				60					
Gly	Gly	Ser	Gln	Glu	Lys	Arg	Gly	Arg	Pro	Ser	Gln	Glu	Pro	Pro	Leu
65					70				75					80	
Ala	Pro	Pro	His	Arg	Arg	Arg	Arg	Ser	Arg	Gln	His	Pro	Gly	Pro	Leu
			85					90					95		
Pro	Pro	Thr	Asn	Ala	Ala	Pro	Thr	Val	Pro	Gly	Pro	Val	Glu	Pro	Leu
			100					105					110		
Leu	Leu	Pro	Pro	Pro	Pro	Pro	Pro	Ser	Leu	Ala	Pro	Ala	Gly	Pro	Ala
		115					120				125				
Val	Ala	Ala	Pro	Leu	Pro	Ala	Pro	Ser	Thr	Arg	Pro	Ser	Ser	Pro	Ser
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Arg	Leu														
145															

<210> 3605

<211> 2004

<212> DNA

<213> Homo sapiens

<400> 3605

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480

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<210> 3606

<211> 324

<212> PRT

<213> Homo sapiens

<400> 3606

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 Lys Gly Asp Tyr Tyr Glu Ala His Gln Met Tyr Arg Thr Leu Phe Phe
 35 40 45
 Arg Tyr Met Ser Gln Ser Lys His Thr Glu Ala Arg Glu Leu Met Tyr
 50 55 60
 Ser Gly Ala Leu Leu Phe Phe Ser His Gly Gln Gln Asn Ser Ala Ala
 65 70 75 80
 Asp Leu Ser Met Leu Val Leu Glu Ser Leu Glu Lys Ala Glu Val Glu
 85 90 95
 Val Ala Asp Glu Leu Leu Glu Asn Leu Ala Lys Val Phe Ser Leu Met
 100 105 110
 Asp Pro Asn Ser Pro Glu Arg Val Thr Phe Val Ser Arg Ala Leu Lys
 115 120 125
 Trp Ser Ser Gly Gly Ser Gly Lys Leu Gly His Pro Arg Leu His Gln
 130 135 140
 Leu Leu Ala Leu Thr Leu Trp Lys Glu Gln Asn Tyr Cys Glu Ser Arg
 145 150 155 160
 Tyr His Phe Leu His Ser Ala Asp Gly Glu Gly Cys Ala Asn Met Leu
 165 170 175
 Val Glu Tyr Ser Thr Ser Arg Gly Phe Arg Ser Glu Val Asp Met Phe
 180 185 190
 Val Ala Gln Ala Val Leu Gln Phe Leu Cys Leu Lys Asn Lys Ser Ser
 195 200 205
 Ala Ser Val Val Phe Thr Thr Tyr Thr Gln Lys His Pro Ser Ile Glu
 210 215 220
 Asp Gly Pro Pro Phe Val Glu Pro Leu Leu Asn Phe Ile Trp Phe Leu
 225 230 235 240
 Leu Leu Ala Val Asp Gly Gly Lys Leu Thr Val Phe Thr Val Leu Cys
 245 250 255
 Glu Gln Tyr Gln Pro Ser Leu Arg Arg Asp Pro Met Tyr Asn Glu Tyr
 260 265 270
 Leu Asp Arg Ile Gly Gln Leu Phe Phe Gly Val Pro Pro Lys Gln Thr
 275 280 285
 Ser Ser Tyr Gly Gly Leu Leu Gly Asn Leu Leu Thr Ser Leu Met Gly
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 Ile Glu Leu Asp

<210> 3607

<211> 1726

<212> DNA

<213> Homo sapiens

<400> 3607

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1620

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 1726

<210> 3608
 <211> 436
 <212> PRT
 <213> Homo sapiens

<400> 3608

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		20						25					30		
Glu	Val	Lys	Trp	Ser	Val	Arg	Met	Thr	Leu	Cys	Ala	Gly	Ile	Cys	Ser
		35					40					45			
Tyr	Glu	Gly	Lys	Gly	Gly	Met	Cys	Ser	Ile	Arg	Leu	Ser	Glu	Pro	Leu
	50					55					60				
Leu	Lys	Leu	Arg	Pro	Arg	Lys	Asp	Leu	Val	Glu	Thr	Leu	Leu	His	Glu
65					70					75				80	
Met	Ile	His	Ala	Tyr	Leu	Phe	Val	Thr	Asn	Asn	Asp	Lys	Asp	Arg	Glu
			85					90						95	
Gly	His	Gly	Pro	Glu	Phe	Cys	Lys	His	Met	His	Arg	Ile	Asn	Ser	Leu
			100					105					110		
Thr	Gly	Ala	Asn	Ile	Thr	Val	Tyr	His	Thr	Phe	His	Asp	Glu	Val	Asp
		115					120					125			
Glu	Tyr	Arg	Arg	His	Trp	Trp	Arg	Cys	Asn	Gly	Pro	Cys	Gln	His	Arg
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Pro	Pro	Tyr	Tyr	Gly	Tyr	Val	Lys	Arg	Ala	Thr	Asn	Arg	Glu	Pro	Ser
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Ala	His	Asp	Tyr	Trp	Trp	Ala	Glu	His	Gln	Lys	Thr	Cys	Gly	Gly	Thr
			165					170						175	
Tyr	Ile	Lys	Ile	Lys	Glu	Pro	Glu	Asn	Tyr	Ser	Lys	Lys	Gly	Lys	Gly
		180					185						190		
Lys	Ala	Lys	Leu	Gly	Lys	Glu	Pro	Val	Leu	Ala	Ala	Glu	Asn	Lys	Asp
	195						200					205			
Lys	Pro	Asn	Arg	Gly	Glu	Ala	Gln	Leu	Val	Ile	Pro	Phe	Ser	Gly	Lys
	210					215					220				
Gly	Tyr	Val	Leu	Gly	Glu	Thr	Ser	Asn	Leu	Pro	Ser	Pro	Gly	Lys	Leu
225					230					235				240	
Ile	Thr	Ser	His	Ala	Ile	Asn	Lys	Thr	Gln	Asp	Leu	Leu	Asn	Gln	Asn
			245					250						255	
His	Ser	Ala	Asn	Ala	Val	Arg	Pro	Asn	Ser	Lys	Ile	Lys	Val	Lys	Phe
		260						265					270		
Glu	Gln	Asn	Gly	Ser	Ser	Lys	Asn	Ser	His	Leu	Val	Ser	Pro	Ala	Val
	275						280					285			
Ser	Asn	Ser	His	Gln	Asn	Val	Leu	Ser	Asn	Tyr	Phe	Pro	Arg	Val	Ser
	290					295					300				
Phe	Ala	Asn	Gln	Lys	Ala	Phe	Arg	Gly	Val	Asn	Gly	Ser	Pro	Arg	Ile
305					310					315				320	
Ser	Val	Thr	Val	Gly	Asn	Ile	Pro	Lys	Asn	Ser	Val	Ser	Ser	Ser	Ser
			325					330					335		
Gln	Arg	Arg	Val	Ser	Ser	Ser	Lys	Ile	Ser	Leu	Arg	Asn	Ser	Ser	Lys

340 345 350
 Val Thr Glu Ser Ala Ser Val Met Pro Ser Gln Asp Val Ser Gly Ser
 355 360 365
 Glu Asp Thr Phe Pro Asn Lys Arg Pro Arg Leu Glu Asp Lys Thr Val
 370 375 380
 Phe Asp Asn Phe Phe Ile Lys Lys Glu Gln Ile Lys Ser Ser Gly Asn
 385 390 395 400
 Asp Pro Lys Tyr Ser Thr Thr Thr Ala Gln Asn Ser Ser Ser Ser
 405 410 415
 Ser Gln Ser Lys Met Val Asn Cys Pro Val Cys Gln Asn Glu Val Leu
 420 425 430
 Gly Val Ser Asp
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<210> 3609

<211> 1286

<212> DNA

<213> Homo sapiens

<400> 3609

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 120
 tgcgtcaacc agtgggagca gctgaggggg ccgggtggca acgaggatgg gccacagaag
 180
 ctggacttgg aagetgatgc tgagcccca gacctcgaga gtacgaacct cttggagagt
 240
 gaagctccca gggactatct cctcaagttt gcctatatgg tggatttggc cagcgacaca
 300
 gcagacaagt tcttcgagct gntttggaac caaaggtgct aagaggggtg tgtgtcctat
 360
 caannctacc ccttgctgcc caccgcttc acccattgtg agcaggtgct gggcgagggg
 420
 gccctggacc gaggcaccta ctactgggag gtggagatta tcgagggctg ggctcagcat
 480
 ggggtcatgg ccgcagactt ctccccacaa gagccctacg accgcgcccg gctgggccc
 540
 aacgcccact cctgctgctt gcagtggaat ggacgcagct tctccgtctg gtttcatggg
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 660
 gaccgtgctt tggccttcta tgctgtacgg gacggcaaga tgagcctcct gcggaggctg
 720
 aaggctccc gggcccgccg ggggtggcat ccggcctccc ccattgacct cttccagagc
 780
 cgctggaca gtcactttgc ggggtctctt acccacagac tcaagcctgc cttcttctg
 840
 gagagtgtgg acgcccactt gcagatcggg cccctcaaga agtctctcat atccgtgctg
 900
 aagaggaggt gatgccgggc acgggctctc ctgctgccgt ctctgctcca ggaagctgcc
 960
 tcctctgggc cctctccttc gtctgggaag gcaccagcat ggtcccaaca caccagcct
 1020

tctcatttct agaggtctcc acctttttat acactcagcc ttccctctcc caggcaggag
 1080
 gacccccaga cctgttccc ctgcagacct cacttctggg agacagagct acagctggga
 1140
 cagctccaag ctaccctaac cctcctttc ccaggtttct agaatagtgt ctggcatgta
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 1260
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 1286

<210> 3610

<211> 268

<212> PRT

<213> Homo sapiens

<400> 3610

Met	Leu	Ala	Val	Ala	Cys	Val	Asn	Gln	Trp	Glu	Gln	Leu	Arg	Gly	Pro
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Gly	Gly	Asn	Glu	Asp	Gly	Pro	Gln	Lys	Leu	Asp	Leu	Glu	Ala	Asp	Ala
		20					25						30		
Glu	Pro	Gln	Asp	Leu	Glu	Ser	Thr	Asn	Leu	Leu	Glu	Ser	Glu	Ala	Pro
		35					40					45			
Arg	Asp	Tyr	Phe	Leu	Lys	Phe	Ala	Tyr	Ile	Val	Asp	Leu	Asp	Ser	Asp
50						55					60				
Thr	Ala	Asp	Lys	Phe	Leu	Gln	Leu	Xaa	Trp	Asn	Gln	Arg	Cys	Gln	Glu
65					70					75				80	
Gly	Ala	Val	Ser	Tyr	Gln	Xaa	Tyr	Pro	Leu	Ser	Pro	Thr	Arg	Phe	Thr
			85						90					95	
His	Cys	Glu	Gln	Val	Leu	Gly	Glu	Gly	Ala	Leu	Asp	Arg	Gly	Thr	Tyr
			100						105					110	
Tyr	Trp	Glu	Val	Glu	Ile	Ile	Glu	Gly	Trp	Val	Ser	Met	Gly	Val	Met
		115					120						125		
Ala	Ala	Asp	Phe	Ser	Pro	Gln	Glu	Pro	Tyr	Asp	Arg	Gly	Arg	Leu	Gly
		130					135				140				
Arg	Asn	Ala	His	Ser	Cys	Cys	Leu	Gln	Trp	Asn	Gly	Arg	Ser	Phe	Ser
145					150					155					160
Val	Trp	Phe	His	Gly	Leu	Glu	Ala	Pro	Leu	Pro	His	Pro	Phe	Ser	Pro
			165						170					175	
Thr	Val	Gly	Val	Cys	Leu	Glu	Tyr	Ala	Asp	Arg	Ala	Leu	Ala	Phe	Tyr
			180						185					190	
Ala	Val	Arg	Asp	Gly	Lys	Met	Ser	Leu	Leu	Arg	Arg	Leu	Lys	Ala	Ser
		195					200					205			
Arg	Pro	Arg	Arg	Gly	Gly	Ile	Pro	Ala	Ser	Pro	Ile	Asp	Pro	Phe	Gln
	210					215						220			
Ser	Arg	Leu	Asp	Ser	His	Phe	Ala	Gly	Leu	Phe	Thr	His	Arg	Leu	Lys
225					230					235					240
Pro	Ala	Phe	Phe	Leu	Glu	Ser	Val	Asp	Ala	His	Leu	Gln	Ile	Gly	Pro
			245						250					255	
Leu	Lys	Lys	Ser	Cys	Ile	Ser	Val	Leu	Lys	Arg	Arg				
			260						265						

<210> 3611

<211> 816

<212> DNA

<213> Homo sapiens

<400> 3611

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120
caatggagac agttggaaaa cctgtacttc agagaaaaga agttttccgt ggaagttcat
180
gaccacgcga gggcttcagt gacaaggagg acgtttgggc acagcggcat tgcagtgcac
240
acgtggtatg catgtccggc attgatcaag tccatctggg ctatggccat aagccaacac
300
cagttctatc tggacagaaa gcagagtaag tccaaaatcc atgcagcacg cagcctgagt
360
gagatcgcca tcgacctgac cgagacgggg acgctgaaga cctcgaagct ggccaacatg
420
ggtagcaagg ggaagatcat cagcggcagc agcggcagcc tgctgtcttc aggttctcag
480
gaatcagata gctcgcagtc ggccaagaag gacatgctgg ctgccttgaa gtccaggcag
540
gaagctctgg aggaaaccct gcgtcagagg ctggaggaac tgaagaagct gtgtctccga
600
gaagctgagc tcacggggcaa gctgccagta gaatatcccc tggatccagg ggaggaacca
660
cccattgttc ggagaagaat aggaacagcc ttcaaactgg atgaacagaa aatcctgccc
720
aaaggagagg aagctgaact ggaacgcctg gaacgagagt ttgccattca gtcccagatt
780
acggaggccg cccgccgctt agccagtgc cccaac
816

<210> 3612

<211> 272

<212> PRT

<213> Homo sapiens

<400> 3612

Tyr	Gly	Val	His	Tyr	Tyr	Ala	Val	Lys	Asp	Lys	Gln	Gly	Ile	Pro	Trp
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Trp	Leu	Gly	Leu	Ser	Tyr	Lys	Gly	Ile	Phe	Gln	Tyr	Asp	Tyr	His	Asp
			20					25					30		
Lys	Val	Lys	Pro	Arg	Lys	Ile	Phe	Gln	Trp	Arg	Gln	Leu	Glu	Asn	Leu
		35				40					45				
Tyr	Phe	Arg	Glu	Lys	Lys	Phe	Ser	Val	Glu	Val	His	Asp	Pro	Arg	Arg
	50				55					60					
Ala	Ser	Val	Thr	Arg	Arg	Thr	Phe	Gly	His	Ser	Gly	Ile	Ala	Val	His
65					70				75					80	
Thr	Trp	Tyr	Ala	Cys	Pro	Ala	Leu	Ile	Lys	Ser	Ile	Trp	Ala	Met	Ala
			85					90					95		
Ile	Ser	Gln	His	Gln	Phe	Tyr	Leu	Asp	Arg	Lys	Gln	Ser	Lys	Ser	Lys
			100					105					110		
Ile	His	Ala	Ala	Arg	Ser	Leu	Ser	Glu	Ile	Ala	Ile	Asp	Leu	Thr	Glu

115	120	125
Thr Gly Thr Leu Lys Thr Ser Lys Leu Ala Asn Met Gly Ser Lys Gly		
130	135	140
Lys Ile Ile Ser Gly Ser Ser Gly Ser Leu Leu Ser Ser Gly Ser Gln		
145	150	155
Glu Ser Asp Ser Ser Gln Ser Ala Lys Lys Asp Met Leu Ala Ala Leu		
165	170	175
Lys Ser Arg Gln Glu Ala Leu Glu Glu Thr Leu Arg Gln Arg Leu Glu		
180	185	190
Glu Leu Lys Lys Leu Cys Leu Arg Glu Ala Glu Leu Thr Gly Lys Leu		
195	200	205
Pro Val Glu Tyr Pro Leu Asp Pro Gly Glu Glu Pro Pro Ile Val Arg		
210	215	220
Arg Arg Ile Gly Thr Ala Phe Lys Leu Asp Glu Gln Lys Ile Leu Pro		
225	230	235
Lys Gly Glu Glu Ala Glu Leu Glu Arg Leu Glu Arg Glu Phe Ala Ile		
245	250	255
Gln Ser Gln Ile Thr Glu Ala Ala Arg Arg Leu Ala Ser Asp Pro Asn		
260	265	270

<210> 3613
 <211> 659
 <212> DNA
 <213> Homo sapiens

<400> 3613
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 actcagggct gccttggggc tccctgccac cctctggaa atgatgcaag tcttgactgt
 120
 cacctggatc cctgcagccc agcctggaat gcgtctggat taggggaaaag acgagaaaacg
 180
 acaactccagg tgttgacagc cccaccaaag cgggaagata gggcagttgc tcagacaaaa
 240
 tactgtatct agtgcttctg ctcttatctt caatcgtggg gttcttttta atgcaaagtg
 300
 tcacaaggcc aggaattccc atgtgtgctc agttggccca cagcatcatt gtgcctagga
 360
 aactgcttca atttatcaag tctctgggc tgggaatctc actgaattcc aaacggcgga
 420
 aagaggaaac tttcccaacc cgatgtgggt gtgacgcgag ccaggggccc cagggaact
 480
 gtcccagagc acaccgtccc cctttaacag caactggagc ttggattcgc tcttatattg
 540
 tacagtcctt tcgaccattg ccttgagca cccgcacacg cgcacgcac tccggccgag
 600
 ctacacaca ctacacaca cgcacgcaa cgcggtcgga gaagagcccc cccccccc
 659

<210> 3614
 <211> 123
 <212> PRT
 <213> Homo sapiens

<400> 3614

Met Gln Ser Val Thr Arg Pro Gly Ile Pro Met Cys Ala Gln Leu Ala
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 His Ser Ile Ile Val Pro Arg Lys Leu Leu Gln Phe Ile Lys Ser Ser
 20 25 30
 Gly Leu Gly Ile Ser Leu Asn Ser Lys Arg Arg Lys Glu Glu Thr Phe
 35 40 45
 Pro Thr Arg Cys Gly Cys Asp Ala Ser Gln Gly Pro Gln Gly His Cys
 50 55 60
 Pro Arg Ala His Arg Pro Pro Leu Thr Ala Thr Gly Ala Trp Ile Arg
 65 70 75 80
 Ser Tyr Ile Val Gln Ser Phe Arg Pro Leu Pro Trp Ser Thr Arg Thr
 85 90 95
 Arg Ala Arg Ile Ser Gly Arg Ala His Thr His Ser Tyr Thr Arg Thr
 100 105 110
 Gln Thr Arg Ser Glu Lys Ser Pro Pro Pro Pro
 115 120

<210> 3615

<211> 1388

<212> DNA

<213> Homo sapiens

<400> 3615

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 120
 cagtcctccgc gagtccagat gcctgtccag cctccaagca aagacacaga agagatggaa
 180
 gcagaggggtg attctgctgc tgagatgaat ggggaggagg aagagagtga ggaggagcgg
 240
 agcggcagcc agacagagtc agaagaggag agctccgaga tggatgatga ggactatgag
 300
 cgacgccgca gcgagtgtgt cagtgagatg ctggacctag agaagcagtt ctcgagagcta
 360
 aaggagaagt tgttcagggg acgactgagt cagctgcggt tgcggctgga ggaagtgggg
 420
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 480
 cgcattcagg tggcagggat ctacaagggc ttctgtctgg atgtgatcag gaataagtac
 540
 gaatgtgagc tgcagggagc caaacagcac ctggagagtg agaagctgct gctctatgac
 600
 acgctgcagg gggagctgca ggagcggatc cagaggctgg aggaggaccg ccagagcctg
 660
 gacctcagct ctgaatggtg ggacgacaaa ctgcacgcc gaggcagctc caggtcttgg
 720
 gactccctgc cggccagcaa gaggaagaag gcacctctgg tttctggccc atacatcgtg
 780
 tacatgcttc aagagatcgg catcctggag gactggacag ccatcaaaaa ggctagggca
 840
 gctgtgtccc ctcaagaag aaaatcggat gacaggcgga cccacaggcc cctcagggtc
 900

tgcccagcca ggctcctgtg gtgctgctgg gccctccac tccatctggc actggcctgg
 960
 actcctcttc tgccctcttc gaggcctgca cagctgtggc cgtggagctg acctgaccag
 1020
 gcaaggctgc tgtctccatc cctgagccgc ctgccacctc ccactcctga agatccatct
 1080
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 1140
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 1200
 agtcagacgt gattatctgg gggctctgtcc accctggctg gatctggagg caagatgcc
 1260
 ggccccccag gtgttctcag ggcagttctt ggtgtctgct tctcagatc caaggactgg
 1320
 aattaaaacc tttcctggga ctctggaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa
 1380
 aaaaaaaaa
 1388

<210> 3616

<211> 290

<212> PRT

<213> Homo sapiens

<400> 3616

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Gly	Asp	Ser	Ala	Glu	Met	Asn	Gly	Glu	Glu	Glu	Glu	Ser	Glu	Glu
			20				25					30		
Glu	Arg	Ser	Gly	Ser	Gln	Thr	Glu	Ser	Glu	Glu	Glu	Ser	Ser	Glu
			35				40					45		Met
Asp	Asp	Glu	Asp	Tyr	Glu	Arg	Arg	Arg	Ser	Glu	Cys	Val	Ser	Glu
			50				55				60			Met
Leu	Asp	Leu	Glu	Lys	Gln	Phe	Ser	Glu	Leu	Lys	Glu	Lys	Leu	Phe
65					70				75					80
Glu	Arg	Leu	Ser	Gln	Leu	Arg	Leu	Arg	Leu	Glu	Glu	Val	Gly	Ala
				85					90					95
Arg	Ala	Pro	Glu	Tyr	Thr	Glu	Pro	Leu	Gly	Gly	Leu	Gln	Arg	Ser
			100					105				110		Leu
Lys	Ile	Arg	Ile	Gln	Val	Ala	Gly	Ile	Tyr	Lys	Gly	Phe	Cys	Leu
			115				120					125		Asp
Val	Ile	Arg	Asn	Lys	Tyr	Glu	Cys	Glu	Leu	Gln	Gly	Ala	Lys	Gln
			130			135				140				His
Leu	Glu	Ser	Glu	Lys	Leu	Leu	Leu	Tyr	Asp	Thr	Leu	Gln	Gly	Glu
145					150				155					160
Gln	Glu	Arg	Ile	Gln	Arg	Leu	Glu	Glu	Asp	Arg	Gln	Ser	Leu	Asp
				165					170					175
Ser	Ser	Glu	Trp	Trp	Asp	Asp	Lys	Leu	His	Ala	Arg	Gly	Ser	Ser
			180				185					190		Arg
Ser	Trp	Asp	Ser	Leu	Pro	Pro	Ser	Lys	Arg	Lys	Lys	Ala	Pro	Leu
			195				200					205		Val
Ser	Gly	Pro	Tyr	Ile	Val	Tyr	Met	Leu	Gln	Glu	Ile	Gly	Ile	Leu
			210			215				220				Glu
Asp	Trp	Thr	Ala	Ile	Lys	Lys	Ala	Arg	Ala	Ala	Val	Ser	Pro	Gln
														Lys

225 230 235 240
 Arg Lys Ser Asp Asp Arg Arg Thr His Arg Pro Leu Arg Val Cys Pro
 245 250 255
 Ala Arg Leu Leu Trp Cys Cys Trp Ala Leu Pro Leu His Leu Ala Leu
 260 265 270
 Ala Trp Thr Pro Pro Leu Pro Ser Ser Arg Pro Ala Gln Leu Trp Pro
 275 280 285
 Trp Ser
 290

<210> 3617

<211> 804

<212> DNA

<213> Homo sapiens

<400> 3617

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 ggctttaaca gcaagggaga ggtgcatggg atcaatggga cccaatgggg ccagactctg
 120
 aggatgggat ggtagtagtg aaggacatag gatgggggta gagtgtggag actttttgaa
 180
 atagtataga tgaatgccct gaggggactg tgaacaagct ctgccctct taggaaatca
 240
 atggggaatc aactaaatta aataaaaaat ggggtcaaga ttaagaggca gggtcaccca
 300
 gggaatggtt taggtcctgg catctttgaa ggggttgaa gggctggcag gaggcactga
 360
 gggccctggg ccctgggcca ggtggtgaat tacagcgact cacggacagc agaagagatc
 420
 tgtgagagca gctocaagat gatcaccttc atcgacctgg caggccacca taagtaccta
 480
 cacaccacca tctttggcct cacatcatc tgccccgact gcgccctgct cctcgtcagt
 540
 gccaacactg ggattgctgg caccacaagg gaacatctgg ggctggccct ggccctgaaa
 600
 gtgcccttct tcatcggtgt cagcaagatc gacctatgtg ccaagaccac agtggagagg
 660
 acagtacgcc agctggagcg ggtcctcaag cagcctggct gccacaagg ccccatgctg
 720
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 780
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 804

<210> 3618

<211> 148

<212> PRT

<213> Homo sapiens

<400> 3618

Gly Pro Trp Ala Leu Gly Gln Val Val Asn Tyr Ser Asp Ser Arg Thr
 1 5 10 15
 Ala Glu Glu Ile Cys Glu Ser Ser Ser Lys Met Ile Thr Phe Ile Asp

	20		25		30
Leu	Ala	Gly	His	His	Lys
	35		40		45
Ser	Tyr	Cys	Pro	Asp	Cys
	50		55		60
Ile	Ala	Gly	Thr	Thr	Arg
65			70		75
Val	Pro	Phe	Phe	Ile	Val
			85		90
Thr	Val	Glu	Arg	Thr	Val
	100		105		110
Gly	Cys	His	Lys	Val	Pro
	115		120		125
Thr	Ala	Ala	Gln	Gln	Phe
	130		135		140
Thr	Leu	Ser	Ser		
145					

<210> 3619

<211> 948

<212> DNA

<213> Homo sapiens

<400> 3619

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 120
 aggtgtcctc tcttgagaag aactgtccat accatgggtg tggttaaggct ttcaccagtt
 180
 ctcaggatgc ccatagggat ggggtgaagcc tgccctggcct gtggtgcttt ccagtggccg
 240
 tcattctcatt agggcccccac agtggcatta ggatgcacct ctggcggtg ttaacgccc
 300
 tctgtgtgtc ggtgtggca gcggtcctgt ggaagcatgt gcggtgcgt gagcatgcag
 360
 ccacactgga ggaggagctg gccctcagcc gacaggccac agagccagcc ccagcactga
 420
 ggatcgacta cccgaaggca ctgcagatcc tgatggaggg cggcacacac atggtgtgca
 480
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 600
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 660
 tcaacttcgt ggagctgect gctgtgtccc tgcgttcat gcccaagccg gtgttcgtgc
 720
 cagacgtggc cctcatcgcc aaccgcttca accccgacaa cctcatgcac gtctttcatg
 780
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 840
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 900

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948

<210> 3620

<211> 159

<212> PRT

<213> Homo sapiens

<400> 3620

Trp	Arg	Ala	Ala	His	Thr	Trp	Cys	Ala	Arg	Ala	Ala	Arg	Thr	Gln	Thr
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Ala	Ser	Ala	Ala	Ser	Ser	Gly	Ser	Ala	Thr	Pro	Thr	Arg	Leu	Arg	Ser
		20						25					30		
Ser	Ser	Ser	Ser	Met	Ala	Thr	Pro	Leu	Ser	Cys	Cys	Pro	Thr	Trp	Ala
		35					40					45			
Pro	Gly	Ala	Ser	Ser	Gln	Pro	Cys	Ser	Thr	Tyr	Pro	Pro	Trp	Arg	Thr
	50					55					60				
Thr	Thr	Leu	Ser	Thr	Ser	Thr	Ser	Trp	Ser	Cys	Leu	Leu	Leu	Pro	Cys
65					70					75				80	
Ala	Ser	Cys	Pro	Ser	Arg	Cys	Ser	Cys	Gln	Thr	Trp	Pro	Ser	Ser	Pro
				85					90					95	
Thr	Ala	Ser	Thr	Pro	Thr	Thr	Ser	Cys	Thr	Ser	Phe	Met	Thr	Thr	Cys
			100					105					110		
Cys	His	Ser	Ser	Thr	Pro	Cys	Gly	Ser	Phe	Pro	Ala	Trp	Pro	Thr	Arg
		115					120					125			
His	Gly	Ser	Ser	Ser	Trp	Arg	Ala	Gly	Ala	Arg	Val	His	Thr	Ser	Thr
	130					135					140				
Ser	Thr	Ser	Cys	Ser	Ala	Pro	Ser	Ser	Leu	Ser	Cys	Gly	His	Ser	
145					150						155				

<210> 3621

<211> 2934

<212> DNA

<213> Homo sapiens

<400> 3621

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ggacaagctg ttgggggtgtg agtgagctct ccagaatggc acatggctcc ggggtgcccc
120
ggttaaaagg aaggatttgc acaccttcca cttagggctc gggtaatccc aaacttcctc
180
ccttaattgg gcttgacagt ctaaaaagca gatcgttctc tctgaggttt tcccaacagt
240
acctcaagaa aataacatct gttttttgta acgttcaca gtattcggaa ttggctacag
300
aacataataa gacacctgcc agcacattac agaataatctt tgttgaacct tcttgagaat
360
tcagagaaac tgctgagtga ccactgaacg aaaagatcta atcttaaggc ttacgcgtgt
420
tccatccacc acatcagaac aatgtcgtat gtttttgtaa atgattcttc tcagactaac
480
gtgccecttg tgcaagcctg tattgatggg gactttaatt attccaagcg gcttttggaa
540

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600
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<211> 228

<212> PRT

<213> Homo sapiens

<400> 3622

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Ser	His	Ser	Leu	Leu	Asn	Pro	Asn	Leu	Gln	Gln	Gly	Glu	Gly	Val	Leu

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<210> 3623
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 <212> DNA
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 Glu Lys Lys Arg Met Asp Lys Ala Ile Gly Tyr Ser Phe Ala Ile Val
 50 55 60
 Gly Ile Asn Ile Thr Asp Leu Ala Tyr Asn Leu Leu Val Ser Gly Ala
 65 70 75 80
 Leu Lys Thr His Phe Tyr Asn Ile Ala Pro Glu Ala Pro Thr Leu Ser

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		100						105					110		
Trp	Ile	Glu	Glu	Asp	Pro	Met	Asp	Ile	Met	Glu	Phe	Asn	Arg	Val	Arg
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Glu	Lys	Phe	Arg	Lys	Arg	Ile	Ile	Lys	Gln	Leu	Gln	Asn	Pro	Asp	Met
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<212> DNA

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420

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600

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720

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<211> 551

<212> PRT

<213> Homo sapiens

<400> 3626

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Trp	Gly	Pro	Ser	Ser	Ser	Leu	Met	Ser	Glu	Ile	Ala	Asp	Leu	Thr	Tyr
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Asn	Val	Val	Ala	Phe	Ser	Glu	Ile	Met	Ser	Met	Ile	Trp	Lys	Arg	Leu
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Lys	Glu	Asn	Met	Tyr	Ala	Val	Gln	Thr	Leu	Lys	Asp	Phe	Gln	Tyr	Val
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Gln	Leu	Val	Ala	Leu	Leu	Arg	Asp	Glu	Asp	Arg	Leu	Arg	Glu	Glu	Arg
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Trp	Pro	Gln	Ser	Ser	Gly	Glu	Glu	Glu	Leu	Gln	Leu	Gln	Leu	Ala	Leu
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<211> 1760

<212> DNA

<213> Homo sapiens

<400> 3627

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1320
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1380
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1440
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1500
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1560
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1620
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1760

<210> 3628

<211> 440

<212> PRT

<213> Homo sapiens

<400> 3628

Gly Glu Gly Asp Gln Gln Asp Ala Ala His Asn Met Gly Asn His Leu
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 Pro Leu Leu Pro Ala Glu Ser Glu Glu Asp Glu Met Glu Val Glu
 20 25 30
 Asp Gln Asp Ser Lys Glu Ala Lys Lys Pro Asn Ile Ile Asn Phe Asp
 35 40 45
 Thr Ser Leu Pro Thr Ser His Thr Tyr Leu Gly Ala Asp Met Glu Glu
 50 55 60
 Phe His Gly Arg Thr Leu His Asp Asp Asp Ser Cys Gln Val Ile Pro
 65 70 75 80
 Val Leu Pro Gln Val Met Met Ile Leu Ile Pro Gly Gln Thr Leu Pro
 85 90 95
 Leu Gln Leu Phe His Pro Gln Glu Val Ser Met Val Arg Asn Leu Ile
 100 105 110
 Gln Lys Asp Arg Thr Phe Ala Val Leu Ala Tyr Ser Asn Val Gln Glu
 115 120 125
 Arg Glu Ala Gln Phe Gly Thr Thr Ala Glu Ile Tyr Ala Tyr Arg Glu
 130 135 140
 Glu Gln Asp Phe Gly Ile Glu Ile Val Lys Val Lys Ala Ile Gly Arg
 145 150 155 160
 Gln Arg Phe Lys Val Leu Glu Leu Arg Thr Gln Ser Asp Gly Ile Gln
 165 170 175
 Gln Ala Lys Val Gln Ile Leu Pro Glu Cys Val Leu Pro Ser Thr Met
 180 185 190
 Ser Ala Val Gln Leu Glu Ser Leu Asn Lys Cys Gln Ile Phe Pro Ser
 195 200 205
 Lys Pro Val Ser Arg Glu Asp Gln Cys Ser Tyr Lys Trp Trp Gln Lys
 210 215 220
 Tyr Gln Lys Arg Lys Phe His Cys Ala Asn Leu Thr Ser Trp Pro Arg
 225 230 235 240
 Trp Leu Tyr Ser Leu Tyr Asp Ala Glu Thr Leu Met Asp Arg Ile Lys
 245 250 255
 Lys Gln Leu Arg Glu Trp Asp Glu Asn Leu Lys Asp Asp Ser Leu Pro
 260 265 270
 Ser Asn Pro Ile Asp Phe Ser Tyr Arg Val Ala Ala Cys Leu Pro Ile
 275 280 285
 Asp Asp Val Leu Arg Ile Gln Leu Leu Lys Ile Gly Ser Ala Ile Gln
 290 295 300
 Arg Leu Arg Cys Glu Leu Asp Ile Met Asn Lys Cys Thr Ser Leu Cys
 305 310 315 320
 Cys Lys Gln Cys Gln Glu Thr Glu Ile Thr Thr Lys Asn Glu Ile Phe
 325 330 335
 Ser Leu Ser Leu Cys Gly Pro Met Ala Ala Tyr Val Asn Pro His Gly
 340 345 350
 Tyr Val His Glu Thr Leu Thr Val Tyr Lys Ala Cys Asn Leu Asn Leu
 355 360 365
 Ile Gly Arg Pro Ser Thr Glu His Ser Trp Phe Pro Gly Tyr Ala Trp
 370 375 380
 Thr Val Ala Gln Cys Lys Ile Cys Ala Ser His Ile Gly Trp Lys Phe
 385 390 395 400
 Thr Ala Thr Lys Lys Asp Met Ser Pro Gln Lys Phe Trp Gly Leu Thr

405 410 415
 Arg Ser Ala Leu Leu Pro Thr Ile Pro Asp Thr Glu Asp Glu Ile Ser
 420 425 430
 Pro Asp Lys Val Ile Leu Cys Leu
 435 440

<210> 3629
 <211> 695
 <212> DNA
 <213> Homo sapiens

<400> 3629
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 120
 acggcgtatg ccatgctgcc cttgggcatg cgggacgccg ccgtcgcggg cctcgcctcc
 180
 tcactctgc atctgctggt cctcgggctg tatcttgggc cacagccgga ctcacggcct
 240
 gcaactgctgc cgcagttggc agcaaacgca gtgctgttcc tgtgcgggaa cgtggcagga
 300
 gtgtaccaca aggcgctgat ggagcgcgcc ctgcgggcca cgttccggga ggcactcagc
 360
 tccttgcaact cagccggcg gctggacacc gagaagaagc accaggtcag ccgggcctag
 420
 gaaggtcaga gcagcgtcc gagggaggag ttgcttagat tacataacgg ggctcctcca
 480
 caagttgagt gactctgggc aggtttcttg acctgtttct tcttttgtat aaaatgtggg
 540
 tattgcccatt cttagaaggt tgtgaggctc aaacaaacca aagcttataa aaagcacttt
 600
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 660
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 695

<210> 3630
 <211> 139
 <212> PRT
 <213> Homo sapiens

<400> 3630
 Thr Arg Pro Leu Ser Gly Leu Val Trp Val Ala Leu Leu Ala Leu Gly
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 His Ala Phe Leu Phe Thr Gly Gly Val Val Ser Ala Trp Asp Gln Val
 20 25 30
 Ser Tyr Phe Leu Phe Val Ile Phe Thr Ala Tyr Ala Met Leu Pro Leu
 35 40 45
 Gly Met Arg Asp Ala Ala Val Ala Gly Leu Ala Ser Ser Leu Ser His
 50 55 60
 Leu Leu Val Leu Gly Leu Tyr Leu Gly Pro Gln Pro Asp Ser Arg Pro
 65 70 75 80
 Ala Leu Leu Pro Gln Leu Ala Ala Asn Ala Val Leu Phe Leu Cys Gly

<400> 3632
Met Gln Tyr Leu Glu Lys Arg Lys Asn Pro Val Cys His Phe Val Thr
1 5 10 15
Pro Leu Asp Gly Ser Val Asp Val Asp Glu His Arg Arg Pro Glu Ala

	20		25		30
Ile Thr Thr	Glu Gly Lys Tyr Trp	Lys Ser Arg	Ile Glu Ile Val Ile		
	35	40	45		
Arg Glu Tyr	His Lys Trp Arg Thr Tyr Phe Lys	Lys Arg Leu Gln Gln			
	50	55	60		
His Lys Asp	Glu Asp Leu Ser Ser Leu Val Gln Asp Asp Asp Met Leu				
	65	70	75	80	
Tyr Trp His	Lys His Gly Asp Gly Trp Lys Thr Pro Val Pro Met Glu				
	85	90	95		
Glu Asp Pro	Leu Leu Asp Thr Asp Met Leu Met Ser Glu Phe Ser Asp				
	100	105	110		
Thr Leu Phe	Ser Thr Leu Ser Ser His Gln Pro Val Ala Trp Pro Asn				
	115	120	125		
Pro Arg Glu	Ile Ala His Leu Gly Asn Ala Asp Met Ile Gln Pro Gly				
	130	135	140		
Leu Ile Pro	Leu Gln Pro Asn Leu Asp Phe Met Asp Thr Phe Glu Pro				
	145	150	155	160	
Phe Gln Asp	Leu Phe Ser Ser Ser Arg Ser Ile Phe Gly Ser Met Leu				
	165	170	175		
Pro Ala Ser	Ala Ser Ala Pro Val Pro Asp Pro Asn Asn Pro Pro Ala				
	180	185	190		
Gln Glu Ser	Ile Leu Pro Thr Thr Ala Leu Pro Thr Val Ser Leu Pro				
	195	200	205		
Asp Ser Leu	Ile Ala Pro Pro Thr Ala Pro Ser Leu Ala Arg				
	210	215	220		

<210> 3633

<211> 1570

<212> DNA

<213> Homo sapiens

<400> 3633

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gcagaagggc tgaagtgaca ggatgttcat tgacctgtca gtggatctga aagttctcta
120

aggagagcct gggcaagcat tcttaggttg atgctggggc ccagagtagc agtgagcatc
180

ctgtgtgaag atggcatttc tcaactgatta ttggaaaagc acaagagcca cgtgctggag
240

ccattgtcca gccttgcctt ggaggagcag tgtctggctt tgtccctaga ttggtccact
300

gggaaaactg gaagggccgg ggaccagccc ttgaagatca tcagcagtga ctccacaggg
360

cagctccacc tctgatggt gaatgagacg aggccaggc tgcagaaagt ggcctcatgg
420

caggcacatc aattcgaggc ctggattgct gctttcaatt actggcatcc agaaattgtg
480

tattcagggg ggcacgatgg ccttctgagg ggctgggaca ccagggtacc cggcaaattt
540

ctcttcacca gcnaaaagac acaccatnng ggtgtgtgca gcatccagag cagccctcat
600

cgggagcaca tcctggccac gggaagctat gatgaacaca tcctactgtg ggacacacga
660

aacatgaagc agccgttggc agatacgccct gtgcaggggtg gggatatggag aatcaagtgg
 720
 caccctttcc accaccacct gtcctggcc gctgcatgc acagtggctt taagatcctc
 780
 aactgcaaaa aggcaatgga ggagaggcag gaggcgacgg tctgacatc tcacacattg
 840
 cccgactcgc tgggtgatgg agccgactgg tctggctgc tcttcggtc tctgcagcgg
 900
 gccccctcgt ggtcctttcc tagcaaccta ggaaccaaga cggcagacct gaaggggtgca
 960
 agcgagttgc caacaccctg tcatgaatgc agagaggata acgatgggga gggccatgcc
 1020
 agaccccaga gtggaatgaa gccactcaca gagggcata ggaagaatgg cacctggctg
 1080
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 1140
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 1260
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 1380
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 aaaaaaaaaa
 1570

<210> 3634

<211> 277

<212> PRT

<213> Homo sapiens

<400> 3634

Met	Val	Asn	Glu	Thr	Arg	Pro	Arg	Leu	Gln	Lys	Val	Ala	Ser	Trp	Gln
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Ala	His	Gln	Phe	Glu	Ala	Trp	Ile	Ala	Ala	Phe	Asn	Tyr	Trp	His	Pro
		20					25					30			
Glu	Ile	Val	Tyr	Ser	Gly	Gly	Asp	Asp	Gly	Leu	Leu	Arg	Gly	Trp	Asp
	35					40					45				
Thr	Arg	Val	Pro	Gly	Lys	Phe	Leu	Phe	Thr	Ser	Xaa	Lys	Thr	His	His
	50				55					60					
Xaa	Gly	Val	Cys	Ser	Ile	Gln	Ser	Ser	Pro	His	Arg	Glu	His	Ile	Leu
65				70				75				80			
Ala	Thr	Gly	Ser	Tyr	Asp	Glu	His	Ile	Leu	Leu	Trp	Asp	Thr	Arg	Asn
			85				90					95			
Met	Lys	Gln	Pro	Leu	Ala	Asp	Thr	Pro	Val	Gln	Gly	Gly	Val	Trp	Arg
			100				105					110			
Ile	Lys	Trp	His	Pro	Phe	His	His	His	Leu	Leu	Leu	Ala	Ala	Cys	Met

	115		120		125										
His	Ser	Gly	Phe	Lys	Ile	Leu	Asn	Cys	Gln	Lys	Ala	Met	Glu	Glu	Arg
	130					135					140				
Gln	Glu	Ala	Thr	Val	Leu	Thr	Ser	His	Thr	Leu	Pro	Asp	Ser	Leu	Val
145					150					155				160	
Tyr	Gly	Ala	Asp	Trp	Ser	Trp	Leu	Leu	Phe	Arg	Ser	Leu	Gln	Arg	Ala
			165							170				175	
Pro	Ser	Trp	Ser	Phe	Pro	Ser	Asn	Leu	Gly	Thr	Lys	Thr	Ala	Asp	Leu
			180					185					190		
Lys	Gly	Ala	Ser	Glu	Leu	Pro	Thr	Pro	Cys	His	Glu	Cys	Arg	Glu	Asp
	195						200					205			
Asn	Asp	Gly	Glu	Gly	His	Ala	Arg	Pro	Gln	Ser	Gly	Met	Lys	Pro	Leu
210						215					220				
Thr	Glu	Gly	Met	Arg	Lys	Asn	Gly	Thr	Trp	Leu	Gln	Ala	Thr	Ala	Ala
225					230					235				240	
Thr	Thr	Arg	Asp	Cys	Gly	Val	Asn	Pro	Glu	Glu	Ala	Asp	Ser	Ala	Phe
			245						250					255	
Ser	Leu	Leu	Ala	Thr	Cys	Ser	Phe	Tyr	Asp	His	Ala	Leu	His	Leu	Trp
			260					265					270		
Glu	Trp	Glu	Gly	Asn											
	275														

<210> 3635

<211> 835

<212> DNA

<213> Homo sapiens

<400> 3635

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 120
 gttttactta aagatgaacc ccagcagact gctgctcaga tgggttgtgc gccaatccag
 180
 cctctggcga tgcctcaagc ttgctctctg gcggcaggtc ccttgctctc aggggtccatc
 240
 gcaaatctta cagaactgca aggagtata gttggacagc cagtactggg ccaagcacag
 300
 ttggcagggc tggggcaagg aattctgaca gaaacacaac aagggttaat ggtagccagc
 360
 cctgctcaga ccctcaatga cacgctggat gacatcatgg cagcagtcag tggaagagca
 420
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 480
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 600
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 720
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 780

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835

<210> 3636

<211> 278

<212> PRT

<213> Homo sapiens

<400> 3636

Xaa Ile Gln Leu Gln Gln Gln Gln Gln Ser Cys Gln His Leu Gly
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Leu Leu Thr Pro Val Gly Val Gly Glu Gln Leu Ser Glu Gly Asp Tyr
20 25 30
Ala Arg Leu Gln Gln Val Asp Pro Val Leu Leu Lys Asp Glu Pro Gln
35 40 45
Gln Thr Ala Ala Gln Met Gly Cys Ala Pro Ile Gln Pro Leu Ala Met
50 55 60
Pro Gln Ala Leu Pro Leu Ala Ala Gly Pro Leu Pro Pro Gly Ser Ile
65 70 75 80
Ala Asn Leu Thr Glu Leu Gln Gly Val Ile Val Gly Gln Pro Val Leu
85 90 95
Gly Gln Ala Gln Leu Ala Gly Leu Gly Gln Gly Ile Leu Thr Glu Thr
100 105 110
Gln Gln Gly Leu Met Val Ala Ser Pro Ala Gln Thr Leu Asn Asp Thr
115 120 125
Leu Asp Asp Ile Met Ala Ala Val Ser Gly Arg Ala Ser Ala Met Ser
130 135 140
Asn Thr Pro Thr His Ser Ile Ala Ala Ser Ile Ser Gln Pro Gln Thr
145 150 155 160
Pro Thr Pro Ser Pro Ile Ile Ser Pro Ser Ala Met Leu Pro Ile Tyr
165 170 175
Pro Ala Ile Asp Ile Asp Ala Gln Thr Glu Ser Asn His Asp Thr Ala
180 185 190
Leu Thr Leu Ala Cys Ala Gly Gly His Glu Glu Leu Val Gln Thr Leu
195 200 205
Leu Glu Arg Gly Ala Ser Ile Glu His Arg Asp Lys Lys Gly Phe Thr
210 215 220
Pro Leu Ile Leu Ala Ala Thr Ala Gly His Val Gly Val Val Glu Ile
225 230 235 240
Leu Leu Asp Asn Gly Ala Asp Ile Glu Ala Gln Ser Glu Arg Thr Lys
245 250 255
Asp Thr Pro Leu Ser Leu Ala Cys Ser Gly Gly Arg Gln Glu Val Val
260 265 270
Glu Leu Leu Leu Ala Arg
275

<210> 3637

<211> 2128

<212> DNA

<213> Homo sapiens

<400> 3637

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120
cctgcccaacc cctgctcttc caggtcgggc cccgggggttc tgaggctgtt agggacagag
180
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240
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300
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420
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660
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720
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780
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1020
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1140
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1200
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1560
acatacagac atatgcaccc ccacacacgc ctatgcacaa acgtggatta tcgcacagac
1620
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1680

tattatcact ttataaaaca tacattaagc ctaataaatg gaccaataag ccaaactatc
 1740
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 1860
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 1920
 aggagagaat tcagccgaag atatgagagt aatgagagac atttccagt cattggatcg
 1980
 tgttttcttt tgtccattat tgtactgtgc tgtaccacat ttatttctat attcattttg
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<210> 3638

<211> 200

<212> PRT

<213> Homo sapiens

<400> 3638

Met	Ala	Ser	Ser	Leu	Thr	Cys	Thr	Gly	Val	Ile	Trp	Ala	Leu	Leu	Ser
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Phe	Leu	Cys	Ala	Ala	Thr	Ser	Cys	Val	Gly	Phe	Phe	Met	Pro	Tyr	Trp
		20						25					30		
Leu	Trp	Gly	Ser	Gln	Leu	Gly	Lys	Pro	Val	Ser	Phe	Gly	Thr	Phe	Arg
		35					40					45			
Arg	Cys	Ser	Tyr	Pro	Val	His	Asp	Glu	Ser	Arg	Gln	Met	Met	Val	Met
	50					55					60				
Val	Glu	Glu	Cys	Gly	Arg	Tyr	Ala	Ser	Phe	Gln	Gly	Ile	Pro	Ser	Ala
65					70					75				80	
Glu	Trp	Arg	Ile	Cys	Thr	Ile	Val	Thr	Gly	Leu	Gly	Cys	Gly	Leu	Leu
			85						90					95	
Leu	Leu	Val	Ala	Leu	Thr	Ala	Leu	Met	Gly	Cys	Cys	Val	Ser	Asp	Leu
		100						105					110		
Ile	Ser	Arg	Thr	Val	Gly	Arg	Val	Ala	Gly	Gly	Ile	Gln	Phe	Leu	Gly
		115					120					125			
Gly	Leu	Leu	Ile	Gly	Ala	Gly	Cys	Ala	Leu	Tyr	Pro	Leu	Gly	Trp	Asp
	130					135					140				
Ser	Glu	Glu	Val	Arg	Gln	Thr	Cys	Gly	Tyr	Thr	Ser	Gly	Gln	Phe	Asp
145					150					155				160	
Leu	Gly	Lys	Cys	Glu	Ile	Gly	Trp	Ala	Tyr	Tyr	Cys	Thr	Gly	Ala	Gly
			165						170					175	
Ala	Thr	Ala	Ala	Met	Leu	Leu	Cys	Thr	Trp	Leu	Ala	Cys	Phe	Ser	Gly
			180					185					190		
Lys	Lys	Gln	Lys	His	Tyr	Pro	Tyr								
		195					200								

<210> 3639

<211> 726

<212> DNA

<213> Homo sapiens

<400> 3639

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 120
 aagactaaca gtggttatct ctccagcgga ttataaatgt tttggttttt tttttttttt
 180
 tgtacatttt agtatttttt gaaatttttt taataagcgt gtattacata cagtaaacia
 240
 aagcacatta atgtaggcag attatcaatg ttatgcattt cactgattgc atatctcttt
 300
 ttttatcaat ggtgaacatt gcaaatgatt gatacgtttt tcttaggaag tggcattgcc
 360
 acaaatgggt tttccaacac cagcagggcc tgagagtgtc atcaccatac actcttgccg
 420
 gcaataaaaa aatttcacct tttaatggat ttaaaaggga aaagttgggg tggtgggttc
 480
 tccagggcat ttctttcatt atgagtgaca tttttctgaa aggaacgtga tctcgttttc
 540
 tagccgatg aagcatttct ccaacaagac ccactgtacc agtcttgga tctccacacc
 600
 tgtgccttct cctgtctctt tctaggtcct gattctcacc tctgctgtg taataaccct
 660
 gtcatttctc ccttatccca gttccatgtc tgtgacaagc ttggaggccg agttgcaagc
 720
 taagat
 726

<210> 3640

<211> 102

<212> PRT

<213> Homo sapiens

<400> 3640

Met	Leu	His	Ala	Ala	Arg	Lys	Arg	Asp	His	Val	Pro	Phe	Arg	Lys	Met
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Ser	Leu	Ile	Met	Lys	Glu	Met	Pro	Trp	Arg	Thr	Gln	His	Pro	Asn	Phe
			20					25				30			
Ser	Leu	Leu	Asn	Pro	Leu	Lys	Gly	Glu	Ile	Phe	Leu	Leu	Pro	Ala	Arg
			35				40					45			
Val	Tyr	Gly	Asp	Asp	Thr	Leu	Arg	Pro	Cys	Trp	Cys	Trp	Lys	Asn	His
		50				55				60					
Leu	Trp	Gln	Cys	His	Phe	Leu	Arg	Lys	Thr	Tyr	Gln	Ser	Phe	Ala	Met
					70				75					80	
Phe	Thr	Ile	Asp	Lys	Lys	Arg	Asp	Met	Gln	Ser	Val	Lys	Cys	Ile	Thr
				85				90						95	
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<210> 3641

<211> 455

<212> DNA

<213> Homo sapiens

<400> 3641
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 180
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 300
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 455

<210> 3642
 <211> 148
 <212> PRT
 <213> Homo sapiens

<400> 3642
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 20 25 30
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 35 40 45
 Pro Leu Glu Arg Arg Ser Gly Arg Gly Ala Arg Asp Ala Arg Ala Leu
 50 55 60
 Thr Ser Trp Ala Pro Val Arg Gly Glu Val Arg Lys Lys Thr Pro Ser
 65 70 75 80
 Glu Val Thr Val Pro Thr Arg Val Asp Ser Pro Arg Pro Asp His Ala
 85 90 95
 Arg Arg Trp Pro Lys Gly Arg Gly Trp Gly Arg Gly Cys Ser Ala Pro
 100 105 110
 Ser Ser Arg Ala Ala Ser Leu Gln Val Phe Ala Leu Ala Arg Arg Ser
 115 120 125
 Pro Arg Glu Gln Phe Gly Thr Val Arg Ile Gly Phe Arg Glu Pro Ala
 130 135 140
 Phe Lys Thr Arg
 145

<210> 3643
 <211> 2243
 <212> DNA
 <213> Homo sapiens

<400> 3643
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180
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360
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420
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480
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 1980
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 2243

<210> 3644

<211> 560

<212> PRT.

<213> Homo sapiens

<400> 3644

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Gln	Val	Ala	Ser	Lys	Ala	Glu	Glu	Asn	Leu	Leu	Met	Val	Leu	Gly
			20					25					30	
Asp	Met	Ser	Asp	Arg	Arg	Ala	Ala	Val	Ile	Phe	Ala	Asp	Thr	Leu
			35				40					45		
Leu	Leu	Phe	Glu	Gly	Ile	Ala	Arg	Ile	Val	Glu	Thr	His	Gln	Pro
			50			55					60			
Val	Glu	Thr	Tyr	Tyr	Gly	Pro	Gly	Arg	Leu	Tyr	Thr	Leu	Ile	Lys
					70					75				80
Leu	Gln	Val	Glu	Cys	Asp	Arg	Gln	Val	Glu	Lys	Val	Val	Asp	Lys
				85					90					95
Ile	Lys	Gln	Arg	Asp	Tyr	His	Gln	Gln	Phe	Arg	His	Val	Gln	Asn
			100					105					110	
Leu	Met	Arg	Asn	Ser	Thr	Thr	Glu	Lys	Ile	Glu	Pro	Arg	Glu	Leu
			115				120					125		
Pro	Ile	Leu	Thr	Glu	Val	Thr	Leu	Met	Asn	Ala	Arg	Ser	Glu	Leu
			130			135					140			
Leu	Arg	Phe	Leu	Lys	Lys	Arg	Ile	Ser	Ser	Asp	Phe	Glu	Val	Gly
					150					155				160
Ser	Met	Ala	Ser	Glu	Glu	Val	Lys	Gln	Glu	His	Gln	Lys	Cys	Leu
				165					170				175	
Lys	Leu	Leu	Asn	Asn	Cys	Leu	Leu	Ser	Cys	Thr	Met	Gln	Glu	Leu
			180					185					190	
Gly	Leu	Tyr	Val	Thr	Met	Glu	Glu	Tyr	Phe	Met	Arg	Glu	Thr	Val
			195				200					205		
Lys	Ala	Val	Ala	Leu	Asp	Thr	Tyr	Glu	Lys	Gly	Gln	Leu	Thr	Ser

210	215	220
Met Val Asp Asp Val Phe Tyr Ile Val Lys Lys Cys Ile Gly Arg Ala		
225	230	235
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	245	250
Thr Thr Glu Leu Glu Ser Asp Phe Arg Asp Val Leu Cys Asn Lys Leu		255
	260	265
Arg Met Gly Phe Pro Ala Thr Thr Phe Gln Asp Ile Gln Arg Gly Val		270
	275	280
Thr Ser Ala Val Asn Ile Met His Ser Ser Leu Gln Gln Gly Lys Phe		285
	290	295
Asp Thr Lys Gly Ile Glu Ser Thr Asp Glu Ala Lys Met Ser Phe Leu		300
305	310	315
Val Thr Leu Asn Asn Val Glu Val Cys Ser Glu Asn Ile Ser Thr Leu		320
	325	330
Lys Lys Thr Leu Glu Ser Asp Cys Thr Lys Leu Phe Ser Gln Gly Ile		335
	340	345
Gly Gly Glu Gln Ala Gln Ala Lys Phe Asp Ser Cys Leu Ser Asp Leu		350
	355	360
Ala Ala Val Ser Asn Lys Phe Arg Asp Leu Leu Gln Glu Gly Leu Thr		365
	370	375
Glu Leu Asn Ser Thr Ala Ile Lys Pro Gln Val Gln Pro Trp Ile Asn		380
385	390	395
Ser Phe Phe Ser Val Ser His Asn Ile Glu Glu Glu Phe Asn Asp		400
	405	410
Tyr Glu Ala Asn Asp Pro Trp Val Gln Gln Phe Ile Leu Asn Leu Glu		415
	420	425
Gln Gln Met Ala Glu Phe Lys Ala Ser Leu Ser Pro Val Ile Tyr Asp		430
	435	440
Ser Leu Thr Gly Leu Met Thr Ser Leu Val Ala Val Glu Leu Glu Lys		445
450	455	460
Val Val Leu Lys Ser Thr Phe Asn Arg Leu Gly Gly Leu Gln Phe Asp		465
	470	475
Lys Glu Leu Arg Ser Leu Ile Ala Tyr Leu Thr Thr Val Thr Thr Trp		480
	485	490
Thr Ile Arg Asp Lys Phe Ala Arg Leu Ser Gln Met Ala Thr Ile Leu		495
	500	505
Asn Leu Glu Arg Val Thr Glu Ile Leu Asp Tyr Trp Gly Pro Asn Ser		510
	515	520
Gly Pro Leu Thr Trp Arg Leu Thr Pro Ala Glu Val Arg Gln Val Leu		525
	530	535
Ala Leu Arg Ile Asp Phe Arg Ser Glu Asp Ile Lys Arg Leu Arg Leu		540
545	550	555
		560

<210> 3645

<211> 823

<212> DNA

<213> Homo sapiens

<400> 3645

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120

tcgggttgat ttctcatct tctatttgat gggctaactg ctctatggaa ggaagatctt
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 720
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<210> 3646

<211> 243

<212> PRT

<213> Homo sapiens

<400> 3646

Met	Asn	Gly	Pro	Thr	Ser	Asn	Phe	Ser	Ser	Lys	Glu	Ile	Gly	Phe	Gln
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Leu	Ala	Ala	Ala	Met	Leu	His	Leu	Phe	Asp	Pro	Thr	Leu	Glu	Pro	Val
		20						25					30		
Thr	Glu	Pro	Pro	Ala	Asn	Leu	Asp	Arg	Leu	Ile	Pro	Met	Tyr	Lys	Gly
	35					40						45			
Ala	Lys	Ile	Gln	Gly	Gly	Ile	Leu	Pro	Gly	Ser	Tyr	His	Tyr	Leu	His
	50					55					60				
Ile	Ala	Lys	Pro	Ala	Ile	Pro	Thr	Pro	Leu	Glu	Val	Gln	Met	Ala	Gln
65					70					75				80	
Pro	Asn	Tyr	Gly	Leu	Glu	Leu	Val	Thr	Gly	Ser	Ala	Lys	Asn	Gly	Thr
			85						90					95	
Tyr	Phe	Arg	Ile	His	Ile	Asn	Lys	Tyr	Lys	Met	Val	Glu	Thr	Ile	Thr
			100					105					110		
Cys	Leu	Ser	Arg	Glu	Pro	Phe	Pro	Ala	Ser	Asn	Tyr	Ile	Arg	Leu	Phe
		115					120					125			
Gly	Gln	His	Glu	Gln	Leu	Leu	Asn	Asn	Leu	Cys	Ala	Arg	Tyr	Asp	Glu
	130					135					140				
Asn	Leu	Ile	Thr	Asp	Leu	Tyr	Ser	Tyr	Phe	Thr	Glu	Pro	Trp	Cys	Leu
145					150					155				160	
Ala	Leu	Phe	His	Asp	Arg	Phe	Ile	Asp	Leu	Arg	Lys	Glu	Leu	Arg	Gln
			165					170					175		
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2801

<212> DNA

<213> Homo sapiens

<400> 3649

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300
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420
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480
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540
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<210> 3650

<211> 189

<212> PRT

<213> Homo sapiens

<400> 3650

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His	Ile	Cys	Ser	Leu	Phe	Ala	Val	Leu	Pro	Phe	Phe	Phe	Gln	Val	Ala
			20					25					30		
Ile	Ser	Ala	Asp	Val	Lys	Glu	Val	Leu	Leu	Thr	Asp	Gly	Asn	Glu	Lys
			35				40					45			
Ala	Ile	Arg	Asn	Val	Gln	Asp	Ile	Ile	Thr	Arg	Asn	Gln	Lys	Ala	Gly
	50					55					60				
Val	Phe	Lys	Thr	Gln	Lys	Ile	Ser	Ser	Cys	Val	Leu	Arg	Trp	Asp	Asn
65					70					75				80	
Glu	Thr	Asp	Val	Ser	Gln	Leu	Glu	Gly	His	Phe	Asp	Ile	Val	Met	Cys
			85					90					95		
Ala	Asp	Cys	Leu	Phe	Leu	Asp	Gln	Tyr	Arg	Ala	Ser	Leu	Val	Asp	Ala
			100					105					110		
Ile	Lys	Arg	Leu	Leu	Gln	Pro	Arg	Gly	Lys	Ala	Met	Val	Phe	Ala	Pro
			115				120						125		
Arg	Arg	Gly	Asn	Thr	Leu	Asn	Gln	Phe	Cys	Asn	Leu	Ala	Glu	Lys	Ala
			130				135					140			
Gly	Phe	Cys	Ile	Gln	Arg	His	Glu	Asn	Tyr	Asp	Glu	His	Ile	Ser	Asn
145					150					155				160	
Phe	His	Ser	Lys	Leu	Lys	Lys	Glu	Asn	Pro	Asp	Ile	Tyr	Glu	Glu	Asn

	165		170		175
Leu	His	Tyr	Pro	Pro	Leu
			Leu	Ile	Leu
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	180		185		

<210> 3651

<211> 2469

<212> DNA

<213> Homo sapiens

<400> 3651

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1320

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 2469

<210> 3652

<211> 384

<212> PRT

<213> Homo sapiens

<400> 3652

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Glu	Gly	Ala	Thr	Val	Val	Ile	Leu	Asn	Met	Pro	Lys	Gly	Thr	Glu	Phe
			20					25					30		
Gly	Ile	Asp	Tyr	Asn	Ser	Trp	Glu	Val	Gly	Pro	Lys	Phe	Arg	Gly	Val
		35					40					45			
Lys	Met	Ile	Pro	Pro	Gly	Ile	His	Phe	Leu	His	Tyr	Ser	Ser	Val	Asp

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Lys Ala Asn Pro Lys Glu Val Gly Pro Arg Met Gly Phe Phe Leu Ser					
65		70		75	80
Leu His Gln Arg Gly Leu Thr Val Leu Arg Trp Ser Thr Leu Arg Glu					
	85		90		95
Glu Val Asp Leu Ser Pro Ala Pro Glu Ser Glu Val Glu Ala Met Arg					
	100		105		110
Ala Asn Leu Gln Glu Leu Asp Gln Phe Leu Gly Pro Tyr Pro Tyr Ala					
	115		120		125
Thr Leu Lys Lys Trp Ile Ser Leu Thr Asn Phe Ile Ser Glu Ala Thr					
	130		135		140
Val Glu Lys Leu Gln Pro Glu Asn Arg Gln Ile Cys Ala Phe Ser Asp					
	145		150		155
Val Leu Pro Val Leu Ser Met Lys His Thr Lys Asp Arg Val Gly Gln					
	165		170		175
Asn Leu Pro Arg Cys Gly Ile Glu Cys Lys Ser Tyr Gln Glu Gly Leu					
	180		185		190
Ala Arg Leu Pro Glu Met Lys Pro Arg Ala Gly Thr Glu Ile Arg Phe					
	195		200		205
Ser Glu Leu Pro Thr Gln Met Phe Pro Glu Gly Ala Thr Pro Ala Glu					
	210		215		220
Ile Thr Lys His Ser Met Asp Leu Ser Tyr Ala Leu Glu Thr Val Leu					
	225		230		235
Ile Lys Gln Phe Pro Ser Ser Pro Gln Asp Val Leu Gly Glu Leu Gln					
	245		250		255
Phe Ala Phe Val Cys Phe Leu Leu Gly Asn Val Tyr Glu Ala Phe Glu					
	260		265		270
His Trp Lys Arg Leu Leu His Leu Leu Cys Arg Ser Glu Ala Ala Met					
	275		280		285
Met Lys His His Thr Leu Tyr Ile Asn Leu Met Ser Ile Leu Tyr His					
	290		295		300
Gln Leu Gly Glu Ile Pro Ala Asp Phe Phe Val Asp Ile Val Ser Gln					
	305		310		315
Asp Asn Phe Leu Thr Ser Thr Leu Gln Val Phe Phe Ser Ser Ala Cys					
	325		330		335
Ser Ile Ala Val Asp Ala Thr Leu Arg Lys Lys Ala Glu Lys Phe Gln					
	340		345		350
Ala His Leu Thr Lys Lys Phe Arg Trp Asp Phe Ala Ala Glu Pro Glu					
	355		360		365
Asp Cys Ala Pro Val Val Val Glu Leu Pro Glu Gly Ile Glu Met Gly					
	370		375		380

<210> 3653

<211> 283

<212> DNA

<213> Homo sapiens

<400> 3653

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 180

acattttttgc ggattgggag gagggccgac gccgtggccg gatagtctct ggagctgcct
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 283

<210> 3654
 <211> 88
 <212> PRT
 <213> Homo sapiens

<400> 3654
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 35 40 45
 Ser Ser Glu Leu Arg Leu His Ile Phe Ala Asp Trp Glu Glu Gly Arg
 50 55 60
 Arg Arg Gly Arg Ile Val Ser Gly Ala Ala Phe Trp Gly Cys Leu Pro
 65 70 75 80
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 85

<210> 3655
 <211> 3477
 <212> DNA
 <213> Homo sapiens

<400> 3655
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 180
 atgtatagag gaaaactccc ccaggcacac agcctccgct ctggaccaac gcaggcttca
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 300
 agacctccca ccccgatcat cttgggatct acagccacat gaaatacaga cacatcgttc
 360
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 420
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 480
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 660
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 720

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1440
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2340

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 2520
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 3240
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 3300
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 3477

<210> 3656

<211> 429

<212> PRT

<213> Homo sapiens

<400> 3656

Met	Ala	Ser	Leu	Lys	Glu	Leu	Ala	Pro	Thr	Gly	Arg	Ile	Met	Asn	Ser
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Cys	Met	Ala	Ser	Leu	Phe	Pro	Ala	Trp	Glu	Pro	Pro	Leu	Ile	Thr	Leu
			20					25				30			
Lys	Ala	Gly	Thr	Gly	Ser	Met	Arg	Ser	Gly	Phe	Pro	Ala	Lys	Ser	Ala
			35				40					45			
Met	Trp	Arg	Tyr	Arg	Gly	Thr	Pro	Phe	Ser	Lys	Ala	Val	Glu	His	Ile
			50			55					60				
Asn	Lys	Thr	Ile	Ala	Pro	Ala	Leu	Val	Ser	Lys	Lys	Leu	Asn	Val	Thr

<400> 3657
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 120
 gtgcagatgt gtcacatgtt cattttcggc tcaaggcgta cacgtgcagg tgtgttacgt
 180
 gttcattttc ggctcaaggc ttacacgtgc aggtgtgcca catgttcatt ttcgggtcaa
 240
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 300
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 337

<210> 3658

<211> 99

<212> PRT

<213> Homo sapiens

<400> 3658

Met	Cys	His	Met	Phe	Ile	Phe	Ser	Ser	Arg	Arg	Thr	Arg	Ala	Gly	Val
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Leu	Arg	Val	His	Phe	Arg	Leu	Lys	Ala	Tyr	Thr	Cys	Arg	Cys	Val	Thr
		20					25					30			
Cys	Ser	Phe	Ser	Ala	Gln	Gly	Val	His	Val	Gln	Val	Cys	Tyr	Val	Phe
		35				40					45				
Ile	Phe	Gly	Ser	Arg	Leu	Thr	Arg	Ala	Gly	Val	Pro	His	Val	His	Phe
	50				55					60					
Arg	Leu	Lys	Ala	Tyr	Met	Cys	Arg	Cys	Val	Thr	Cys	Ser	Leu	Ser	Ala
65				70				75					80		
Gln	Arg	Val	His	Val	Gln	Val	Cys	His	Met	Phe	Ile	Phe	Gly	Ser	Arg
			85					90					95		
Arg	Thr	Arg													

<210> 3659

<211> 1025

<212> DNA

<213> Homo sapiens

<400> 3659

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 120
 gttgaaaata agacggccca gatattaaat cttcagcaac atttatctgc ccttgaaaaa
 180
 gatattaaac acaatgagga acttcttaaa aggtgccaac tacattataa agaactaaag
 240
 atgaaaataa gaaaaaatat ttctgaaatt cggaacttg agaacataga agaacaccag
 300
 tctgtagata ttgcaacttt ggaagatgaa gctcaggaaa ataaaagcaa aatgaaaatg
 360
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 420
 gaagcagaaa ataagtatga tgcaattaaa ttcaaaatta atcaactatc ggagctagca
 480

gaccactta aggatgaatt aaaccttgc tattctgaag tggataacca aaaacgaggg
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 aaacgacatt atgaaaaaaa acaaaaagaa cacttggata ccttaaataa aaagaaacga
 600
 gaactggata tgaaagagaa agaactagag gagaaaatgt cacaagcaag acaaatctgc
 660
 ccagagcgta tagaagtaga aaaatctgca tcaattctgg acaaagaaat taatcgatta
 720
 aggcagaaga tacaggcaga acatgctagt catggagatc gagaggaaat aatgaggcag
 780
 taccaagaag caagagagac ctatcttgat ctggatagta aagtgaggac tttaaaaaag
 840
 tttattaaat tactgggaga aatcatggag cacagattca agacatatca acaatttaga
 900
 aggtgtttga ctttacgatg caaattatac ttgacaact tactatctca gcgggcctat
 960
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 gaaaa
 1025

<210> 3660

<211> 341

<212> PRT

<213> Homo sapiens

<400> 3660

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Ser	Ser	Glu	Asn	Thr	Arg	Pro	Lys	Phe	Leu	Ser	Arg	Asp	Val	Asp	Ser
			20					25					30		
Glu	Ile	Ser	Asp	Leu	Glu	Asn	Glu	Val	Glu	Asn	Lys	Thr	Ala	Gln	Ile
	35					40						45			
Leu	Asn	Leu	Gln	Gln	His	Leu	Ser	Ala	Leu	Glu	Lys	Asp	Ile	Lys	His
	50					55					60				
Asn	Glu	Glu	Leu	Leu	Lys	Arg	Cys	Gln	Leu	His	Tyr	Lys	Glu	Leu	Lys
65					70				75				80		
Met	Lys	Ile	Arg	Lys	Asn	Ile	Ser	Glu	Ile	Arg	Glu	Leu	Glu	Asn	Ile
			85					90					95		
Glu	Glu	His	Gln	Ser	Val	Asp	Ile	Ala	Thr	Leu	Glu	Asp	Glu	Ala	Gln
			100					105					110		
Glu	Asn	Lys	Ser	Lys	Met	Lys	Met	Val	Glu	Glu	His	Met	Glu	Gln	Gln
	115						120					125			
Lys	Glu	Asn	Met	Glu	His	Leu	Lys	Ser	Leu	Lys	Ile	Glu	Ala	Glu	Asn
	130					135					140				
Lys	Tyr	Asp	Ala	Ile	Lys	Phe	Lys	Ile	Asn	Gln	Leu	Ser	Glu	Leu	Ala
145					150				155					160	
Asp	Pro	Leu	Lys	Asp	Glu	Leu	Asn	Leu	Ala	Asp	Ser	Glu	Val	Asp	Asn
			165					170						175	
Gln	Lys	Arg	Gly	Lys	Arg	His	Tyr	Glu	Lys	Lys	Gln	Lys	Glu	His	Leu
			180					185					190		
Asp	Thr	Leu	Asn	Lys	Lys	Lys	Arg	Glu	Leu	Asp	Met	Lys	Glu	Lys	Glu
	195						200					205			
Leu	Glu	Glu	Lys	Met	Ser	Gln	Ala	Arg	Gln	Ile	Cys	Pro	Glu	Arg	Ile

210		215		220
Glu Val Glu Lys Ser Ala	Ser Ile Leu Asp Lys	Glu Ile Asn Arg Leu		
225	230	235	240	
Arg Gln Lys Ile Gln Ala	Glu His Ala Ser His	Gly Asp Arg Glu Glu		
	245	250	255	
Ile Met Arg Gln Tyr Gln	Glu Ala Arg Glu Thr	Tyr Leu Asp Leu Asp		
	260	265	270	
Ser Lys Val Arg Thr Leu	Lys Lys Phe Ile Lys	Leu Leu Gly Glu Ile		
	275	280	285	
Met Glu His Arg Phe Lys	Thr Tyr Gln Gln Phe	Arg Arg Cys Leu Thr		
	290	295	300	
Leu Arg Cys Lys Leu Tyr	Phe Asp Asn Leu Leu	Ser Gln Arg Ala Tyr		
305	310	315	320	
Cys Gly Lys Met Asn Phe	Asp His Lys Asn Glu	Thr Leu Ser Ile Ser		
	325	330	335	
Val Gln Pro Gly Glu				
	340			

<210> 3661

<211> 1117

<212> DNA

<213> Homo sapiens

<400> 3661

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120
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240
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300
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360
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420
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480
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540
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600
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660
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720
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780
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900

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 1020
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 1117

<210> 3662

<211> 371

<212> PRT

<213> Homo sapiens

<400> 3662

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Asp	His	Arg	Leu	Ser	Ile	Ser	Lys	Lys	Thr	Ala	Asn	Gly	Gly	Leu	Lys
			20					25					30		
Pro	Ser	Val	Tyr	Pro	Tyr	Lys	Leu	Tyr	Arg	Leu	Leu	Pro	Met	Lys	Cys
		35					40					45			
Lys	Arg	Ala	Pro	Tyr	Lys	Ser	Tyr	Arg	Asn	Ser	Ser	Tyr	Glu	Asn	Ala
	50					55				60					
Arg	Glu	Asn	Ser	Gln	Met	Asn	Glu	Ser	Ala	Pro	Gly	Thr	Tyr	Val	Val
65				70					75					80	
Gln	Asn	Pro	His	Ser	Ser	Glu	Leu	Pro	Thr	Leu	Asn	Phe	Gln	Asp	Thr
			85						90					95	
Val	Asn	Thr	Leu	Thr	Asn	Ser	Pro	Ala	Ile	Pro	Leu	Glu	Thr	Ser	Ala
			100					105					110		
Cys	Gln	Asp	Ile	Pro	Thr	Ser	Ala	Asn	Val	Gln	Asn	Ala	Glu	Gly	Thr
	115						120					125			
Lys	Trp	Gly	Glu	Glu	Ala	Leu	Lys	Met	Asp	Leu	Asp	Asn	Asn	Phe	Tyr
130						135				140					
Ser	Thr	Glu	Val	Ser	Val	Ser	Ser	Thr	Glu	Asn	Ala	Val	Ser	Ser	Asp
145					150					155					160
Leu	Arg	Ala	Gly	Asp	Val	Pro	Val	Leu	Ser	Leu	Ser	Asn	Ser	Ser	Glu
				165					170					175	
Asn	Ala	Ala	Ser	Val	Ile	Ser	Tyr	Ser	Gly	Ser	Ala	Pro	Ser	Val	Ile
			180					185					190		
Val	His	Ser	Ser	Gln	Phe	Ser	Ser	Val	Ile	Met	His	Ser	Asn	Ala	Ile
	195						200					205			
Ala	Ala	Met	Thr	Ser	Ser	Asn	His	Arg	Ala	Phe	Ser	Asp	Pro	Ala	Val
210						215					220				
Ser	Gln	Ser	Leu	Lys	Asp	Asp	Ser	Lys	Pro	Glu	Pro	Asp	Lys	Val	Gly
225					230					235				240	
Arg	Phe	Ala	Ser	Arg	Pro	Lys	Ser	Ile	Lys	Glu	Lys	Lys	Lys	Thr	Thr
				245					250					255	
Ser	His	Thr	Arg	Gly	Glu	Ile	Pro	Glu	Glu	Ser	Asn	Tyr	Val	Ala	Asp
			260					265					270		
Pro	Gly	Gly	Ser	Leu	Ser	Lys	Thr	Thr	Asn	Ile	Ala	Glu	Glu	Thr	Ser
	275						280					285			
Lys	Ile	Glu	Thr	Tyr	Ile	Ala	Lys	Pro	Ala	Leu	Pro	Gly	Thr	Ser	Thr
290						295					300				
Asn	Ser	Asn	Val	Ala	Pro	Leu	Cys	Gln	Ile	Thr	Val	Lys	Ile	Gly	Asn

305 310 315 320
 Glu Ala Ile Val Lys Arg His Ile Leu Gly Ser Lys Leu Phe Tyr Lys
 325 330 335
 Arg Gly Arg Arg Pro Lys Tyr Gln Met Gln Glu Glu Leu Leu Pro Gln
 340 345 350
 Gly Asn Asp Pro Glu Pro Ser Gly Asp Ser Pro Leu Gly Leu Cys Gln
 355 360 365
 Ser Glu Cys
 370

<210> 3663
 <211> 481
 <212> DNA
 <213> Homo sapiens

<400> 3663
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 120
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 180
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 240
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 300
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 360
 aagtaagta ttacttattg gctcattact tatttttctc agacctctca gggatgagta
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 480
 g
 481

<210> 3664
 <211> 138
 <212> PRT
 <213> Homo sapiens

<400> 3664
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 Arg Asp Met Gln Leu Ile Ala Leu Glu Gln Leu Cys Met Leu Leu Leu
 20 25 30
 Met Ser Asp Asn Val Asp Arg Cys Phe Glu Thr Cys Pro Pro Arg Thr
 35 40 45
 Phe Leu Pro Ala Leu Tyr Lys Ile Phe Leu Asp Glu Ser Ala Pro Asp
 50 55 60
 Asn Val Leu Glu Val Thr Ala Arg Ala Ile Thr Tyr Tyr Leu Asp Val
 65 70 75 80
 Ser Ala Glu Cys Thr Arg Arg Ile Val Gly Val Asp Gly Ala Ile Lys
 85 90 95
 Ala Leu Cys Asn Arg Leu Val Val Val Glu Leu Asn Asn Arg Thr Ser

100 105 110
Arg Asp Leu Ala Glu Gln Cys Val Lys Val Ser Ile Thr Tyr Trp Leu
115 120 125
Ile Thr Tyr Phe Ser Gln Thr Ser Gln Gly
130 135

<210> 3665

<211> 6633

<212> DNA

<213> Homo sapiens

<400> 3665

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120
gggccctggc gcaacgagag cgccctgagc gtggaaacgc tgctcgacgt gctcgtctgc
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<212> PRT

<213> Homo sapiens

<400> 3666

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Val	Leu	Val	Cys	Leu	Tyr	Thr	Glu	Cys	Ser	His	Ser	Ala	Leu	Arg	Arg
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Asp	Lys	Tyr	Val	Ala	Glu	Phe	Leu	Glu	Trp	Ala	Lys	Pro	Phe	Thr	Gln
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Leu	Val	Lys	Glu	Met	Gln	Leu	His	Arg	Glu	Asp	Phe	Glu	Ile	Ile	Lys
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Val	Ile	Gly	Arg	Gly	Ala	Phe	Gly	Glu	Val	Ala	Val	Val	Lys	Met	Lys
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Asn	Thr	Glu	Arg	Ile	Tyr	Ala	Met	Lys	Ile	Leu	Asn	Lys	Trp	Glu	Met
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Leu	Lys	Arg	Ala	Glu	Thr	Ala	Cys	Phe	Arg	Glu	Glu	Arg	Asp	Val	Leu
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Val	Asn	Gly	Asp	Cys	Gln	Trp	Ile	Thr	Ala	Leu	His	Tyr	Ala	Phe	Gln
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Asp	Glu	Asn	His	Leu	Tyr	Leu	Val	Met	Asp	Tyr	Tyr	Val	Gly	Gly	Asp
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Leu	Leu	Thr	Leu	Leu	Ser	Lys	Phe	Glu	Asp	Lys	Leu	Pro	Glu	Asp	Met
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Ala	Arg	Phe	Tyr	Ile	Gly	Glu	Met	Val	Leu	Ala	Ile	Asp	Ser	Ile	His
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Gln	Leu	His	Tyr	Val	His	Arg	Asp	Ile	Lys	Pro	Asp	Asn	Val	Leu	Leu
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Met	Asn	Asp	Asp	Gly	Thr	Val	Gln	Ser	Ser	Val	Ala	Val	Gly	Thr	Pro

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Asp Tyr Ile Ser Pro Glu Ile Leu Gln Ala Met Glu Asp Gly Met Gly																				
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Glu Met Leu Tyr Gly Glu Thr Pro Phe Tyr Ala Glu Ser Leu Val Glu																				
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His Val Thr Asp Val Ser Glu Glu Ala Lys Asp Leu Ile Gln Arg Leu																				
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Lys Lys His Ala Phe Phe Glu Gly Leu Asn Trp Glu Asn Ile Arg Asn																				
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Phe Thr Phe Thr Thr Glu Ser Cys Phe Ser Asp Arg Gly Ser Leu Lys																				
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Ser Ile Met Gln Ser Asn Thr Leu Thr Lys Asp Glu Asp Val Gln Arg																				
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Thr Gln Lys Val Asp Ala Met Arg Gln Glu Met Arg Arg Ala Glu Lys																				
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Ser Lys Glu Arg Lys Leu Arg Glu His Ser Glu Asn Phe Cys Lys Gln																				
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Met Glu Ser Glu Leu Glu Ala Leu Lys Val Lys Gln Gly Gly Arg Gly																				

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Glu Leu	Glu Lys	Lys Val	Leu Phe	Tyr Glu	Glu Glu	Glu Leu	Val Arg	Arg	
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Ser Asn Pro Thr Asn Phe Asn His Val Ala His Met Gly Pro Gly Asp					
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Gly Met Gln Val Leu Met Asp Leu Pro Leu Ser Ala Val Pro Pro Ser					
	1620		1625		1630
Gln Glu Glu Arg Pro Gly Pro Ala Pro Thr Asn Leu Ala Arg Gln Pro					
	1635		1640		1645
Pro Ser Arg Asn Lys Pro Tyr Ile Ser Trp Pro Ser Ser Gly Gly Ser					
	1650		1655		1660
Glu Pro Ser Val Thr Val Pro Leu Arg Ser Met Ser Asp Pro Asp Gln					
1665	1670		1675		1680
Asp Phe Asp Lys Glu Pro Asp Ser Asp Ser Thr Lys His Ser Thr Pro					
	1685		1690		1695
Ser Asn Ser Ser Asn Pro Ser Gly Pro Pro Ser Pro Asn Ser Pro His					
	1700		1705		1710
Arg Ser Gln Leu Pro Leu Glu Gly Leu Glu Gln Pro Ala Cys Asp Thr					
	1715		1720		1725

<210> 3667

<211> 505

<212> DNA

<213> Homo sapiens

<400> 3667

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 120
 tgattgtatt tactctttct tccctactca tagtatgcgt tccattttga ggaatcacag
 180
 atatcgaaga gatgccagaa cactagaaga tgaagaagag atgtgggtta acacagatga
 240
 agatgacatg gaagatggag aagctgtagt gtctccatct gacaaaacta aaaatgatga
 300
 tgatattatg gatccaataa gtaaattcat ggaaaggaag aaattaaaag aaagtgagga
 360
 aaaggaagtg cttctgaaaa caaacctttc tggacggcag agcccaagtt tcaagctttc
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<210> 3668

<211> 117

<212> PRT

<213> Homo sapiens

<400> 3668

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 20           25           30
Glu Asp Gly Glu Ala Val Val Ser Pro Ser Asp Lys Thr Lys Asn Asp
 35           40           45
Asp Asp Ile Met Asp Pro Ile Ser Lys Phe Met Glu Arg Lys Lys Leu
 50           55           60
Lys Glu Ser Glu Glu Lys Glu Val Leu Leu Lys Thr Asn Leu Ser Gly
 65           70           75           80
Arg Gln Ser Pro Ser Phe Lys Leu Ser Leu Ser Ser Gly Thr Lys Thr
 85           90           95
Asn Leu Thr Ser Gln Ser Ser Thr Thr Asn Leu Pro Gly Ser Pro Gly
100           105           110
Ser Pro Gly Ser Pro
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<210> 3669

<211> 1226

<212> DNA

<213> Homo sapiens

<400> 3669

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120
ggattaatct ttacattaa tcattcactt tatgaaaacc tggatgaaga attaatgaa
180
gaattagcag caaaagtgtg tcagatgttt tatgtggctg agccaaagca agtgcccat
240
attctctgta gtccttctat gaagaatatt aatcctttaa ctgccatgag ctatctaagg
300
aagatggata cttctgggtt ttcattccatc ttagtgacac tgagcaaggc agcagtggca
360
ctgaaaatgg gagatcttga cgtgtacaga aatgaaatga aaagccatcc agagatgaag
420
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480
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600
gtgctttgtg gtaaggatga agataccatc cctcagctct tgatagactt ttgggaagct
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cagctagtgg catgtctccc agatgtggta cttcaggaac tctttttcaa actcacatca
720
cagtacatct ggagattgtc taagaggcag cctcctgaca ccacaccatt gccaacatcg
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gaggatctga taaatgctg tagtcattat ggettaattt atccatgggt tcacgtcgta
840

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atatcatctg attcttttagc tgataaaaaat tatacagaag atctttcaaa attacagtct
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 960
 gaagacacta ttgccggcct cagtgtccat gttctgtgtc gtacacgctt gaaagagtat
 1020
 gaacagtgca tagacatact gttagagaga tgcccggagg cagtcattcc atatgcta
 1080
 catgaactga aagaagagaa ccggactctg tgggtgaaaa aactgttgcc tgaactttgt
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 1226

<210> 3670

<211> 385

<212> PRT

<213> Homo sapiens

<400> 3670

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Val	Glu	Asp	Gly	Leu	Gln	Lys	Tyr	Glu	Arg	Gly	Leu	Ile	Phe	Tyr	Ile
			20					25					30		
Asn	His	Ser	Leu	Tyr	Glu	Asn	Leu	Asp	Glu	Glu	Leu	Asn	Glu	Glu	Leu
		35					40					45			
Ala	Ala	Lys	Val	Val	Gln	Met	Phe	Tyr	Val	Ala	Glu	Pro	Lys	Gln	Val
	50					55					60				
Pro	His	Ile	Leu	Cys	Ser	Pro	Ser	Met	Lys	Asn	Ile	Asn	Pro	Leu	Thr
65					70					75				80	
Ala	Met	Ser	Tyr	Leu	Arg	Lys	Met	Asp	Thr	Ser	Gly	Phe	Ser	Ser	Ile
			85						90					95	
Leu	Val	Thr	Leu	Ser	Lys	Ala	Ala	Val	Ala	Leu	Lys	Met	Gly	Asp	Leu
			100					105					110		
Asp	Val	Tyr	Arg	Asn	Glu	Met	Lys	Ser	His	Pro	Glu	Met	Lys	Leu	Val
		115					120					125			
Cys	Gly	Phe	Ile	Leu	Glu	Pro	Arg	Leu	Leu	Ile	Gln	His	Arg	Lys	Gly
	130					135					140				
Gln	Ile	Val	Pro	Thr	Glu	Leu	Ala	Thr	His	Leu	Lys	Glu	Thr	Gln	Pro
145					150					155				160	
Gly	Leu	Leu	Val	Ala	Ser	Val	Leu	Gly	Leu	Gln	Lys	Asn	Ser	Lys	Ile
			165					170						175	
Gly	Ile	Glu	Glu	Ala	Asp	Ser	Phe	Phe	Lys	Val	Leu	Cys	Gly	Lys	Asp
		180					185					190			
Glu	Asp	Thr	Ile	Pro	Gln	Leu	Leu	Ile	Asp	Phe	Trp	Glu	Ala	Gln	Leu
	195					200					205				
Val	Ala	Cys	Leu	Pro	Asp	Val	Val	Leu	Gln	Glu	Leu	Phe	Phe	Lys	Leu
	210					215					220				
Thr	Ser	Gln	Tyr	Ile	Trp	Arg	Leu	Ser	Lys	Arg	Gln	Pro	Pro	Asp	Thr
225					230					235				240	
Thr	Pro	Leu	Arg	Thr	Ser	Glu	Asp	Leu	Ile	Asn	Ala	Cys	Ser	His	Tyr
			245					250						255	
Gly	Leu	Ile	Tyr	Pro	Trp	Val	His	Val	Val	Ile	Ser	Ser	Asp	Ser	Leu

	260		265		270
Ala Asp Lys	Asn Tyr Thr Glu Asp	Leu Ser Lys	Leu Gln Ser	Leu Ile	
275	280	285			
Cys Gly Pro	Ser Phe Asp Ile Ala	Ser Ile Ile	Pro Phe Leu	Glu Pro	
290	295	300			
Leu Ser Glu	Asp Thr Ile Ala Gly	Leu Ser Val	His Val Leu	Cys Arg	
305	310	315	320		
Thr Arg Leu	Lys Glu Tyr Glu Gln	Cys Ile Asp	Ile Leu Leu	Glu Arg	
	325	330	335		
Cys Pro Glu	Ala Val Ile Pro Tyr	Ala Asn His	Glu Leu Lys	Glu Glu	
	340	345	350		
Asn Arg Thr	Leu Trp Trp Lys Lys	Leu Leu Pro	Glu Leu Cys	Gln Arg	
355	360	365			
Ile Lys Cys	Gly Gly Glu Lys Tyr	Gln Leu Tyr	Leu Ser Ser	Leu Lys	
370	375	380			

Ala
385

<210> 3671

<211> 828

<212> DNA

<213> Homo sapiens

<400> 3671

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120
aggcatctg gggtaagtaa aaacaaacac atagagcctg cctggagaag ctcatggctt
180
gatggaaaga taagcaagaa gagttaattt ctaatcaata tgataaaaag gtcagagagc
240
agtttctgaa aaacatgttt ttgagttgag tcttgaaaga caaggagatg ttagtaaagc
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360
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420
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480
tacatacata agcatataga tacatatagc caaagttacc tttttaatga tcttttttac
540
ccagtgtatt ctggaggtcg aatggtcaca tatgaacatc tccgagaggt tgtgtttggc
600
aaaagtgaag atgagcatta tcccctttgg aaatcagtea ttggagggat gatggctggt
660
gttattggcc agtttttagc caatccaact gacctagtga aggttcagat gcaaatggaa
720
ggaaaaagga aactggaagg aaaaccattg cgatttcgtg gtgtacatca tgcatttgca
780
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828

<210> 3672

<211> 124
 <212> PRT
 <213> Homo sapiens

<400> 3672
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 20 25 30
 Gly Gly Arg Met Val Thr Tyr Glu His Leu Arg Glu Val Val Phe Gly
 35 40 45
 Lys Ser Glu Asp Glu His Tyr Pro Leu Trp Lys Ser Val Ile Gly Gly
 50 55 60
 Met Met Ala Gly Val Ile Gly Gln Phe Leu Ala Asn Pro Thr Asp Leu
 65 70 75 80
 Val Lys Val Gln Met Gln Met Glu Gly Lys Arg Lys Leu Glu Gly Lys
 85 90 95
 Pro Leu Arg Phe Arg Gly Val His His Ala Phe Ala Lys Ile Leu Ala
 100 105 110
 Glu Gly Gly Ile Arg Gly Leu Trp Ala Gly Trp Val
 115 120

<210> 3673
 <211> 1052
 <212> DNA
 <213> Homo sapiens

<400> 3673
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 120
 gagcagtggg acagcttcaa tgatcaacat gtcagcagga taacacaaga ggacattaag
 180
 aaaacacatg gtggatcttc aggaagcaga ggatattatt ctagtgcttt cgcaagttcc
 240
 acaaatgcat atatgctgat ctatagactg aaggatccag ccagaaatgc aaaatttcta
 300
 gaagtggatg aatacccaga acatattaaa aacttgggtgc agaaagagag agagttggaa
 360
 gaacaagaaa agagacaacg agaaattgag cgcaatacat gcaagataaa attattctgt
 420
 ttgcataccta caaaacaagt aatgatggaa aataaattgg aggttcataa ggataagaca
 480
 ttaaaggaag cagtagaaat ggcttataag atgatggatt tagaagaggt aataccctg
 540
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 600
 ggagaagaag atacaccaat ggggcttcta ctaggtggcg tcaagtcaac atatatgttt
 660
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 720
 gagccatttt acaccatttt tagttggtct gtacttagaa ttttcctgag aaaggttttt
 780

tttttattgt agcaatgaac ataatttaca ttttgtatat ggtcttaca tgtagaataa
 840
 ttttgacagg ttgagaagta ctcagcacca gcttggaatt aagttctaga ttacttgcaa
 900
 agagttgtgt acataatattt aaaaacaaca aaaaacaaca aagcttctag cttacggctc
 960
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 1020
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 1052

<210> 3674

<211> 263

<212> PRT

<213> Homo sapiens

<400> 3674

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Phe	Ser	Val	Met	Val	His	Ser	Gly	Ser	Ala	Ala	Gly	Gly	His	Tyr	Tyr
			20					25					30		
Ala	Cys	Ile	Lys	Ser	Phe	Ser	Asp	Glu	Gln	Trp	Tyr	Ser	Phe	Asn	Asp
			35				40					45			
Gln	His	Val	Ser	Arg	Ile	Thr	Gln	Glu	Asp	Ile	Lys	Lys	Thr	His	Gly
	50					55				60					
Gly	Ser	Ser	Gly	Ser	Arg	Gly	Tyr	Tyr	Ser	Ser	Ala	Phe	Ala	Ser	Ser
65					70				75					80	
Thr	Asn	Ala	Tyr	Met	Leu	Ile	Tyr	Arg	Leu	Lys	Asp	Pro	Ala	Arg	Asn
				85					90					95	
Ala	Lys	Phe	Leu	Glu	Val	Asp	Glu	Tyr	Pro	Glu	His	Ile	Lys	Asn	Leu
			100					105					110		
Val	Gln	Lys	Glu	Arg	Glu	Leu	Glu	Gln	Glu	Lys	Arg	Gln	Arg	Glu	
			115				120					125			
Ile	Glu	Arg	Asn	Thr	Cys	Lys	Ile	Lys	Leu	Phe	Cys	Leu	His	Pro	Thr
	130					135					140				
Lys	Gln	Val	Met	Met	Glu	Asn	Lys	Leu	Glu	Val	His	Lys	Asp	Lys	Thr
145					150				155					160	
Leu	Lys	Glu	Ala	Val	Glu	Met	Ala	Tyr	Lys	Met	Met	Asp	Leu	Glu	Glu
				165					170					175	
Val	Ile	Pro	Leu	Asp	Cys	Cys	Arg	Leu	Val	Lys	Tyr	Asp	Glu	Phe	His
			180					185					190		
Asp	Tyr	Leu	Glu	Arg	Ser	Tyr	Glu	Gly	Glu	Glu	Asp	Thr	Pro	Met	Gly
	195						200					205			
Leu	Leu	Leu	Gly	Gly	Val	Lys	Ser	Thr	Tyr	Met	Phe	Asp	Leu	Leu	Leu
	210					215						220			
Glu	Thr	Arg	Lys	Pro	Asp	Gln	Val	Phe	Gln	Ser	Tyr	Lys	Pro	Gly	Gly
225					230					235				240	
Glu	Pro	Phe	Tyr	Thr	Ile	Phe	Ser	Trp	Ser	Val	Leu	Arg	Ile	Phe	Leu
				245					250					255	
Arg	Lys	Val	Phe	Phe	Leu	Leu									
				260											

<210> 3675

<211> 837

<212> DNA

<213> Homo sapiens

<400> 3675

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 120
 gacagctata ttgtgcgtgt caaggctgtg gttatgacca gagatgactc cagcggggga
 180
 tggttccac aggaaggagg cgggatcagt cgcgtcgggg tctgtaaggt catgcacccc
 240
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 300
 gtattggaat gctatgtaag aaaggacttg gtctacacca aagccaatcc aacgtttcat
 360
 cactggaagg tcgataatag gaagtttga cttactttcc aaagcctgc tgatgcccga
 420
 gcctttgaca ggggagtaag gaaagcaatc gaagacctta tagaagaagt agaaaatgat
 480
 tctggcgggc ccagaaggct cctggcctac ccactgtcct cctgtaatca gaggccagg
 540
 gtgtacagct gccactgaaa aggaaggga tctgtgacct ctggagccct ggttcggttt
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 660
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 720
 aaaaattctc cactgcagca catccaggta tcaaatacaga gggttaaaga agccatagac
 780
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<210> 3676

<211> 154

<212> PRT

<213> Homo sapiens

<400> 3676

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Lys	Ala	Val	Val	Met	Thr	Arg	Asp	Asp	Ser	Ser	Gly	Gly	Trp	Phe	Pro
			20					25					30		
Gln	Glu	Gly	Gly	Gly	Ile	Ser	Arg	Val	Gly	Val	Cys	Lys	Val	Met	His
		35					40				45				
Pro	Glu	Gly	Asn	Gly	Arg	Ser	Gly	Phe	Leu	Ile	His	Gly	Glu	Arg	Gln
	50				55					60					
Lys	Asp	Lys	Leu	Val	Val	Leu	Glu	Cys	Tyr	Val	Arg	Lys	Asp	Leu	Val
65				70					75					80	
Tyr	Thr	Lys	Ala	Asn	Pro	Thr	Phe	His	His	Trp	Lys	Val	Asp	Asn	Arg
				85					90					95	
Lys	Phe	Gly	Leu	Thr	Phe	Gln	Ser	Pro	Ala	Asp	Ala	Arg	Ala	Phe	Asp
			100					105					110		
Arg	Gly	Val	Arg	Lys	Ala	Ile	Glu	Asp	Leu	Ile	Glu	Glu	Val	Glu	Asn

115 120 125
 Asp Ser Gly Gly Pro Arg Arg Leu Leu Ala Tyr Pro Leu Ser Ser Cys
 130 135 140
 Asn Gln Arg Pro Arg Val Tyr Ser Cys His
 145 150

<210> 3677
 <211> 418
 <212> DNA
 <213> Homo sapiens

<400> 3677
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 120
 tgccgaaaga gcatggagga agatgaaagg cagacaggtc gagaacatgc agtggcgatc
 180
 tccttgtcac acacatctcg caaatcacag tcttgtggag atgactctca ttcgtcctcg
 240
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 300
 tgggaccta gctcgttctt gtcggcacat aagctctcgg gcctctggaa ttccccacat
 360
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 418

<210> 3678
 <211> 139
 <212> PRT
 <213> Homo sapiens

<400> 3678
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 Leu Pro Pro Asp Phe Met Pro Lys Leu Val Lys Asn Leu Leu Gly Glu
 20 25 30
 Met Pro Leu Trp Val Cys Gln Ser Cys Arg Lys Ser Met Glu Glu Asp
 35 40 45
 Glu Arg Gln Thr Gly Arg Glu His Ala Val Ala Ile Ser Leu Ser His
 50 55 60
 Thr Ser Cys Lys Ser Gln Ser Cys Gly Asp Asp Ser His Ser Ser Ser
 65 70 75 80
 Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Cys Pro Gly
 85 90 95
 Asn Ser Gly Asp Trp Asp Pro Ser Ser Phe Leu Ser Ala His Lys Leu
 100 105 110
 Ser Gly Leu Trp Asn Ser Pro His Ser Ser Gly Ala Met Pro Gly Ser
 115 120 125
 Ser Leu Gly Ser Pro Pro Thr Ile Pro Gly Ala
 130 135

<210> 3679
 <211> 567

<212> DNA

<213> Homo sapiens

<400> 3679

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 120
 gagatcgag agatcaaggc ccagctggag acagccctga agtggaggaa ctatgaggtg
 180
 aagctgcggc tgctgctgca cctggaggaa ctgcagatgg agcatgatat ccggcactat
 240
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 aaggtggaat tggaccgtgt caagctgagc tttccatga gcctcctgag ccgctttgtg
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 gatgggctga ccttcaaggt gaactttacc ttcaaccgcc agccgctgag agtccagcac
 540
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 567

<210> 3680

<211> 189

<212> PRT

<213> Homo sapiens

<400> 3680

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Tyr	Pro	Pro	Pro	Arg	Leu	Arg	Gln	Leu	Leu	Pro	Met	Leu	Leu	Gln	Gly
			20					25					30		
Thr	Ser	Ile	Phe	Thr	Ala	Pro	Lys	Glu	Ile	Ala	Glu	Ile	Lys	Ala	Gln
			35				40					45			
Leu	Glu	Thr	Ala	Leu	Lys	Trp	Arg	Asn	Tyr	Glu	Val	Lys	Leu	Arg	Leu
			50			55					60				
Leu	Leu	His	Leu	Glu	Glu	Leu	Gln	Met	Glu	His	Asp	Ile	Arg	His	Tyr
65					70					75				80	
Asp	Leu	Glu	Ser	Val	Pro	Met	Thr	Trp	Asp	Pro	Val	Asp	Gln	Asn	Pro
				85					90					95	
Arg	Leu	Leu	Thr	Leu	Glu	Val	Pro	Gly	Val	Thr	Glu	Ser	Arg	Pro	Ser
			100					105						110	
Val	Leu	Arg	Gly	Asp	His	Leu	Phe	Ala	Leu	Leu	Ser	Ser	Glu	Thr	His
			115				120					125			
Gln	Glu	Asp	Pro	Ile	Thr	Tyr	Lys	Gly	Phe	Val	His	Lys	Val	Glu	Leu
			130				135					140			
Asp	Arg	Val	Lys	Leu	Ser	Phe	Ser	Met	Ser	Leu	Leu	Ser	Arg	Phe	Val
145					150					155				160	
Asp	Gly	Leu	Thr	Phe	Lys	Val	Asn	Phe	Thr	Phe	Asn	Arg	Gln	Pro	Leu
				165					170					175	
Arg	Val	Gln	His	Arg	Ala	Trp	Glu	Leu	Thr	Gly	Arg	Trp			

180

185

<210> 3681

<211> 788

<212> DNA

<213> Homo sapiens

<400> 3681

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 120
 gagaccggga ggcagagctt cagcagctgc gggacagcct ggggctgagc atggagcagc
 180
 gcggcgaggg tcgctcgca ggcgctggc caggcctgag cctctgccac catggccatt
 240
 gtgcagactc tgccagtgc actggagcct gctcctgaag ctgccactgc cccacaagct
 300
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<210> 3682

<211> 185

<212> PRT

<213> Homo sapiens

<400> 3682

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 35 40 45
 Gly Pro Pro Gly Pro Thr Phe Arg Gln Gln Asp Gly Leu Leu Arg
 50 55 60
 Gly Gly Tyr Glu Ala Gln Glu Pro Leu Cys Pro Ala Val Pro Pro Arg
 65 70 75 80
 Lys Ala Val Pro Val Thr Ser Phe Thr Tyr Ile Asn Glu Asp Phe Arg

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Gln	Arg	Ala	His	Asn	Ala	His	Leu	Arg	Gly	Pro	Pro	Pro	Lys	Leu	Ile
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Pro	Val	Ser	Gly	Lys	Leu	Glu	Lys	Asn	Ile	Glu	Lys	Ile	Leu	Ile	Arg
	130					135					140				
Pro	Thr	Ala	Phe	Lys	Pro	Val	Leu	Pro	Lys	Pro	Arg	Gly	Ala	Pro	Ser
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Leu	Pro	Ser	Phe	Met	Gly	Pro	Arg	Ala	Thr	Gly	Leu	Ser	Gly	Ser	Gln
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<210> 3683

<211> 4421

<212> DNA

<213> Homo sapiens

<400> 3683

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<210> 3684

<211> 384

<212> PRT

<213> Homo sapiens

<400> 3684

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			20					25					30		
Cys	Lys	Val	Arg	Leu	Leu	Asp	Gly	Gly	Asp	Phe	Val	Ser	Leu	Ser	Ser
		35				40						45			
Arg	Glu	Glu	Val	Gln	Glu	Asn	Cys	Val	Arg	Trp	Arg	Lys	Arg	Phe	Thr
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Phe	Val	Cys	Lys	Met	Ser	Ala	Asn	Pro	Ala	Thr	Gly	Leu	Leu	Asp	Pro
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Cys	Val	Phe	Arg	Val	Ser	Val	Arg	Lys	Glu	Leu	Lys	Gly	Gly	Lys	Ala
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Tyr	Ser	Lys	Leu	Gly	Phe	Ala	Asp	Leu	Asn	Leu	Ala	Glu	Phe	Ala	Gly
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Glu	Glu	Pro	Asp	Gln	Asn	Leu	Ser	Ser	Pro	Glu	Glu	Val	Phe	His	Ser
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Gly	His	Ser	Arg	Asn	Ser	Ser	Tyr	Ala	Ser	Gln	Gln	Ser	Lys	Ile	Ser
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His	Arg	Arg	Asn	Thr	Ser	Thr	Ser	Ser	Ser	Ala	Ser	Gly	Gly	Leu	Gly
			260					265					270		
Met	Thr	Val	Glu	Gly	Pro	Glu	Gly	Ser	Glu	Arg	Glu	His	Arg	Pro	Pro
		275					280					285			
Glu	Lys	Pro	Pro	Arg	Pro	Pro	Arg	Pro	Leu	His	Leu	Ser	Asp	Arg	Ser
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Phe	Arg	Arg	Lys	Lys	Asp	Ser	Val	Glu	Ser	His	Pro	Thr	Trp	Val	Asp
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Asp	Thr	Arg	Ile	Asp	Ala	Asp	Ala	Ile	Val	Glu	Lys	Ile	Val	Gln	Ser

	325		330		335
Gln Asp Phe Thr Asp Gly Ser Asn Thr Glu Asp Ser Asn Leu Arg Leu					
	340		345		350
Phe Val Ser Arg Asp Gly Ser Ala Thr Leu Ser Gly Ile Gln Leu Ala					
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Thr Arg Val Ser Ser Gly Val Tyr Glu Pro Val Val Ile Glu Ser His					
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<210> 3685

<211> 1293

<212> DNA

<213> Homo sapiens

<400> 3685

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<210> 3686
 <211> 111
 <212> PRT
 <213> Homo sapiens

<400> 3686
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 20 25 30
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 35 40 45
 Arg Val Pro Cys Leu Cys Pro Pro Arg Arg Arg His Pro Pro Arg Ser
 50 55 60
 Phe Thr Ser Cys Thr Phe Ser Gly Ser Arg Ser His Ile His Pro Thr
 65 70 75 80
 Trp Arg Ser Pro His Asp Val Pro Gly Ser Val Leu Ala Pro Ala Ala
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 Ala Leu Gly Asn Arg Ile Gly Lys Arg Ser Pro Arg Val Asp Ala
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<210> 3687
 <211> 566
 <212> DNA
 <213> Homo sapiens

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<210> 3688

<211> 57
 <212> PRT
 <213> Homo sapiens

<400> 3688
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 Xaa Leu His Val Ser Ala Ala Pro His
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<210> 3689
 <211> 1562
 <212> DNA
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<210> 3690

<211> 504

<212> PRT

<213> Homo sapiens

<400> 3690

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			20					25					30		
Thr	Asp	Glu	Ala	Glu	Lys	Arg	Ser	Arg	Lys	Pro	Glu	Lys	Glu	Pro	Arg
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Gln	Cys	Cys	Asn	Pro	Pro	Leu	Ser	Glu	Glu	Met	Leu	Pro	Pro	Gly	Glu
			85						90					95	
Trp	Met	Cys	His	Arg	Cys	Thr	Val	Arg	Arg	Lys	Lys	Arg	Glu	Gln	Lys
			100					105					110		
Lys	Glu	Leu	Gly	His	Val	Asn	Gly	Leu	Val	Asp	Lys	Ser	Gly	Lys	Arg
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Thr	Thr	Ser	Pro	Ser	Ser	Asp	Thr	Asp	Leu	Leu	Asp	Arg	Ser	Ala	Ser
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Thr	Ser	Glu	Gln	Asn	Asp	Val	Asp	Glu	Asp	Ile	Ile	Asp	Val	Asp	Glu
			180					185					190		
Glu	Pro	Val	Ala	Ala	Glu	Pro	Asp	Tyr	Val	Gln	Pro	Gln	Leu	Arg	Arg
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Pro	Phe	Glu	Leu	Leu	Ile	Ala	Ala	Ala	Met	Glu	Arg	Asn	Pro	Thr	Gln

210	215	220
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225	230	235
Ser Lys Arg Arg Arg Lys	Glu Glu Thr Thr Gly	Lys Asn Val Lys Lys
245	250	255
Thr Gln His Glu Leu Asp	His Asn Gly Leu Val	Pro Leu Pro Val Lys
260	265	270
Val Cys Phe Thr Cys Asn	Arg Ser Cys Arg Val	Ala Pro Leu Ile Gln
275	280	285
Cys Asp Tyr Cys Pro Leu	Leu Phe His Met Asp	Cys Leu Glu Pro Pro
290	295	300
Leu Thr Ala Met Pro Leu	Gly Arg Trp Met Cys	Pro Asn His Ile Glu
305	310	315
His Val Val Leu Asn Gln	Lys Asn Met Thr Leu	Ser Asn Arg Cys Gln
325	330	335
Val Phe Asp Arg Phe Gln	Asp Thr Val Ser Gln	His Val Val Lys Val
340	345	350
Asp Phe Leu Asn Arg Ile	His Lys His Pro Pro	Asn Arg Arg Val
355	360	365
Leu Gln Ser Val Lys Arg	Arg Ser Leu Lys Val	Pro Asp Ala Ile Lys
370	375	380
Ser Gln Tyr Gln Phe Pro	Pro Pro Leu Ile Ala	Pro Ala Ala Ile Arg
385	390	395
Asp Gly Glu Leu Ile Cys	Asn Gly Ile Pro Glu	Glu Ser Gln Met His
405	410	415
Leu Leu Asn Ser Glu His	Leu Ala Thr Gln Ala	Glu Gln Gln Glu Trp
420	425	430
Leu Cys Ser Val Val Ala	Leu Gln Cys Ser Ile	Leu Lys His Leu Ser
435	440	445
Ala Lys Gln Met Pro Ser	His Trp Asp Ser Glu	Gln Thr Glu Lys Ala
450	455	460
Asp Ile Lys Pro Val Ile	Val Thr Asp Ser Ser	Val Thr Thr Ser Leu
465	470	475
Gln Thr Ala Asp Lys Thr	Pro Thr Pro Ser His	Tyr Pro Leu Ser Cys
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Pro Ser Gly Ile Ser Thr	Gln Asn	
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<210> 3691

<211> 418

<212> DNA

<213> Homo sapiens

<400> 3691

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<210> 3692
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 3692
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 35 40 45
 Arg Ile Ala Arg Ile Arg Cys Gln Leu Lys Ala Val Cys Gln Pro Arg
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 Cys Lys His Gly Glu Cys Ile Gly Pro Asn Lys Cys Lys Cys His Pro
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<210> 3693
 <211> 2641
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 <213> Homo sapiens

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2340

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 2640
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 2641

<210> 3694
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 <212> PRT
 <213> Homo sapiens

<400> 3694
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 35 40 45
 Ala Val Phe Ala Gly Met Lys Arg Pro Cys Glu Glu Thr Thr Ser Glu
 50 55 60
 Ser Asp Met Asp Glu Thr Ile Asp Val Gly Ser Glu Asn Asn Tyr Ser
 65 70 75 80
 Gly Gln Ser Thr Ser Ser Val Ile Arg Leu Asn Ser Pro Thr Thr Thr
 85 90 95
 Ser Gln Ile Met Ala Arg Lys Lys Arg Arg Gly Ile Ile Glu Lys Arg
 100 105 110
 Arg Arg Asp Arg Ile Asn Asn Ser Leu Ser Glu Leu Arg Arg Leu Val
 115 120 125
 Pro Thr Ala Phe Glu Lys Gln Gly Ser Ala Lys Leu Glu Lys Ala Glu
 130 135 140
 Ile Leu Gln Met Thr Val Asp His Leu Lys Met Leu Gln Ala Thr Gly
 145 150 155 160
 Gly Lys Gly Tyr Phe Asp Ala His Ala Leu Ala Met Asp Phe Met Ser
 165 170 175
 Ile Gly Phe Arg Glu Cys Leu Thr Glu Val Ala Arg Tyr Leu Ser Ser
 180 185 190
 Val Glu Gly Leu Asp Ser Ser Asp Pro Leu Arg Val Arg Leu Val Ser
 195 200 205
 His Leu Ser Thr Cys Ala Thr Gln Arg Glu Ala Ala Ala Met Thr Ser
 210 215 220
 Ser Met Ala His His Xaa Ser Ser Ala Pro Pro Ala Ser Leu Gly Arg
 225 230 235 240
 Arg Leu Pro Pro Pro Ala Arg Ser Pro Ala Pro Ala Gln Arg Pro Pro
 245 250 255
 Cys Leu Arg Val Asn Pro Leu Ser Pro Leu His Asn Phe Arg Ser Ala
 260 265 270
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275	280	285
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290	295	300
Pro Leu Ser Thr Ser Leu	Leu Ser Ala Thr Val	His Ala Ala
305	310	315
Ala Ala Ala Ala Thr Ala	Ala Ala His Ser Phe	Pro Leu Ser Phe Ala
325	330	335
Gly Ala Phe Pro Met Leu	Pro Pro Asn Ala Ala	Ala Val Ala Ala
340	345	350
Ala Thr Ala Ile Ser Pro	Pro Leu Ser Val Ser	Ala Thr Ser Ser Pro
355	360	365
Gln Gln Thr Ser Ser Gly	Thr Asn Asn Lys Pro	Tyr Arg Pro Trp Gly
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<210> 3695

<211> 1615

<212> DNA

<213> Homo sapiens

<400> 3695

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960

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<210> 3696

<211> 146

<212> PRT

<213> Homo sapiens

<400> 3696

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			20					25					30		
Tyr	Phe	Ala	Glu	Tyr	Trp	Tyr	Gln	Ala	Gln	Cys	Cys	Gln	Tyr	Asp	Tyr
		35					40					45			
Cys	Asn	Ser	Trp	Ser	Ser	Pro	Gln	Leu	Gln	Ser	Ser	Leu	Pro	Glu	Pro
	50					55					60				
His	Asp	Arg	Pro	Leu	Ala	Leu	Pro	Leu	Ser	Asp	Ser	Gln	Ile	Gln	Trp
65					70					75				80	
Phe	Tyr	Gln	Ala	Leu	Asn	Leu	Ser	Leu	Pro	Leu	Pro	Asn	Phe	His	Ala
				85					90				95		
Gly	Thr	Glu	Pro	Asp	Gly	Leu	Asp	Pro	Met	Val	Thr	Leu	Ser	Leu	Asn
			100					105					110		
Leu	Gly	Leu	Ser	Phe	Ala	Glu	Leu	Arg	Arg	Met	Tyr	Leu	Phe	Leu	Asn
		115						120				125			
Ser	Ser	Gly	Leu	Leu	Val	Leu	Pro	Gln	Ala	Gly	Leu	Leu	Thr	Pro	His
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145															

<210> 3697

<211> 550

<212> DNA

<213> Homo sapiens

<400> 3697

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<210> 3698

<211> 183

<212> PRT

<213> Homo sapiens

<400> 3698

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		20					25					30			
Ala	Arg	Gln	Ser	Trp	Gly	Gln	Cys	Gln	Pro	Val	Cys	Gln	Pro	Arg	Cys
		35				40					45				
Lys	His	Gly	Glu	Cys	Ile	Gly	Pro	Asn	Lys	Cys	Lys	Cys	His	Pro	Gly
	50				55						60				
Tyr	Ala	Gly	Lys	Thr	Cys	Asn	Gln	Asp	Leu	Asn	Glu	Cys	Gly	Leu	Lys
65				70					75					80	
Pro	Arg	Pro	Cys	Lys	His	Arg	Cys	Met	Asn	Thr	Tyr	Gly	Ser	Tyr	Lys
			85					90					95		
Cys	Tyr	Cys	Leu	Asn	Gly	Tyr	Met	Leu	Met	Pro	Asp	Gly	Ser	Cys	Ser
		100					105					110			
Ser	Ala	Leu	Thr	Cys	Ser	Met	Ala	Asn	Cys	Gln	Tyr	Gly	Cys	Asp	Val
	115					120					125				
Val	Lys	Gly	Gln	Ile	Arg	Cys	Gln	Cys	Pro	Ser	Pro	Gly	Leu	Gln	Leu
	130				135						140				
Ala	Pro	Asp	Gly	Arg	Thr	Cys	Val	Asp	Val	Asp	Glu	Cys	Ala	Thr	Gly
145				150					155					160	
Arg	Ala	Ser	Cys	Pro	Lys	Phe	Arg	Gln	Cys	Val	Asn	Thr	Phe	Gly	Ser
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Tyr	Ile	Cys	Lys	Cys	His	Lys									
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<210> 3699
<211> 510
<212> DNA
<213> Homo sapiens

<400> 3699
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<210> 3700
<211> 127
<212> PRT
<213> Homo sapiens

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35 40 45
Arg Asp Pro Asn Leu Pro Val His Ile Arg Gly Trp Leu His Lys Gln
50 55 60
Asp Ser Ser Gly Leu Arg Leu Trp Lys Arg Arg Trp Phe Val Leu Ser
65 70 75 80
Gly His Cys Leu Phe Tyr Tyr Lys Asp Ser Arg Glu Glu Ser Val Leu
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Gly Ser Val Leu Leu Pro Ser Tyr Asn Ile Arg Pro Asp Gly Pro Gly
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Ala Pro Arg Gly Arg Arg Phe Thr Phe Thr Ala Glu His Pro Gly
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<210> 3701
<211> 733
<212> DNA
<213> Homo sapiens

<400> 3701

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<210> 3702

<211> 236

<212> PRT

<213> Homo sapiens

<400> 3702

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			20					25					30		
Ser	Asn	Leu	Lys	Glu	His	Lys	Lys	Thr	His	Thr	Ala	Asp	Lys	Val	Phe
			35				40					45			
Thr	Cys	Asp	Glu	Cys	Gly	Lys	Ser	Phe	Asn	Met	Gln	Arg	Lys	Leu	Val
			50			55					60				
Lys	His	Arg	Ile	Arg	His	Thr	Gly	Glu	Arg	Pro	Tyr	Ser	Cys	Ser	Ala
65				70					75					80	
Cys	Gly	Lys	Cys	Phe	Gly	Gly	Ser	Gly	Asp	Leu	Arg	Arg	His	Val	Arg
			85						90					95	
Thr	His	Thr	Gly	Glu	Lys	Pro	Tyr	Thr	Cys	Glu	Ile	Cys	Asn	Lys	Cys
			100					105					110		
Phe	Thr	Arg	Ser	Ala	Val	Leu	Arg	Arg	His	Lys	Lys	Met	His	Cys	Lys
			115				120					125			
Ala	Gly	Asp	Glu	Ser	Pro	Asp	Val	Leu	Glu	Glu	Leu	Ser	Gln	Ala	Ile
			130			135					140				
Glu	Thr	Ser	Asp	Leu	Glu	Lys	Ser	Gln	Ser	Ser	Asp	Ser	Phe	Ser	Gln
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<211> 3294
<212> DNA
<213> Homo sapiens
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<210> 3704

<211> 619

<212> PRT

<213> Homo sapiens

<400> 3704

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 Asp Gly Leu Gln Tyr Ser Pro Val Gln Gly Gly Asp Pro Ser Glu Asn
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 Lys Lys Lys Val Glu Val Ile Asp Leu Thr Ile Glu Ser Ser Ser Asp
 435 440 445
 Glu Glu Asp Leu Pro Pro Thr Lys Lys His Cys Ser Val Thr Ser Ala
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 Ala Ile Pro Ala Leu Pro Gly Ser Lys Gly Val Leu Thr Ser Gly His
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 Gln Pro Ser Ser Val Leu Arg Ser Pro Ala Met Gly Thr Leu Gly Gly
 485 490 495
 Asp Phe Leu Ser Ser Leu Pro Leu His Glu Tyr Pro Pro Ala Phe Pro
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<210> 3705

<211> 1737

<212> DNA

<213> Homo sapiens

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<400> 3706
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 Ala Gly Thr Glu Ala Gly Arg Val Gly Gly Val Thr Val Glu Gln Gly
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 Lys Ser Leu Ile Asn Tyr Glu Pro His Gly Thr Arg Thr Ala Gly Phe
 65 70 75 80
 Thr Ala His Pro Pro Lys Ser Thr Ser Val Cys Val Cys Xaa Arg Gln
 85 90 95
 His Ile Cys Thr Cys Val Cys Met Cys Val Arg Lys Cys Val Pro Arg
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 Gln His Ile Cys Met Cys Ala Cys Val Cys Ile Arg Thr Ala Ile Cys
 115 120 125
 Thr Cys Val His Val Gln Thr Ala Tyr Leu Cys Thr Cys Val Cys Pro
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 Gly Asn Ile Cys Thr Cys Val Ser Val Glu Ala Ala Leu Ser Val Cys
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 <211> 585
 <212> DNA
 <213> Homo sapiens

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<210> 3708
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 3708
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 Glu Asn Ala Phe Asp Asn Ile Gln Leu Pro Tyr Met Ile Lys Thr Leu
 35 40 45
 Lys Lys Leu Gly Ile Glu Gly Met Tyr Leu Asn Val Ile Lys Ala Val
 50 55 60
 Tyr Asp Arg Pro Xaa Val Ser Ile Ile Leu Asn Gly Glu Asn Leu Gln
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<210> 3709
 <211> 3768
 <212> DNA
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<210> 3710

<211> 70

<212> PRT

<213> Homo sapiens

<400> 3710

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Cys	Asp	Val	Ile	Leu	Val	Ala	Gly	Asp	Arg	Arg	Ile	Pro	Ala	His	Arg
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Leu	Val	Leu	Ser	Ser	Val	Ser	Asp	Tyr	Phe	Ala	Ala	Met	Phe	Thr	Asn
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<210> 3711

<211> 1366

<212> DNA

<213> Homo sapiens

<400> 3711

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<210> 3712

<211> 368

<212> PRT

<213> Homo sapiens

<400> 3712

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			20					25					30		
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	50					55					60				
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Val	Trp	Asn	Val	Gln	Leu	Ser	Asp	His	Thr	Leu	Ala	Glu	Arg	Cys	Tyr
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Ser	Glu	Ala	Ser	Asp	Leu	Lys	Val	Ile	His	Trp	Asn	Ser	Pro	Lys	Lys
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Cys	Pro	Ser	Gln	Pro	Pro	Pro	Gly	Ala	Glu	Gln	Leu	Gln	Gln	Ala	Leu
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Ala	Gln	Leu	Asp	Glu	Glu	Asp	Pro	Cys	Phe	Glu	Phe	Arg	Gln	Gln	Gln
		180					185					190			
Leu	Thr	Val	His	Arg	Val	His	Val	Thr	Phe	Leu	Pro	His	Glu	Pro	Pro
	195					200						205			
Pro	Pro	Arg	Pro	His	Asp	Val	Thr	Leu	Val	Ala	Gln	Leu	Ser	Met	Asp
	210				215						220				
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Ser	Leu	Ala	Leu	Tyr	Leu	Thr	Asp	Ala	Glu	Ala	Gln	Gln	Phe	Leu	His
			245						250					255	
Phe	Val	Glu	Ala	Ser	Pro	Val	Leu	Ala	Ala	Arg	Gln	Asp	Val	Ala	Tyr
			260						265					270	
His	Val	Val	Tyr	Arg	Glu	Gly	Pro	Leu	Tyr	Pro	Val	Asn	Gln	Leu	Arg
			275						280				285		
Asn	Val	Ala	Leu	Ala	Gln	Ala	Leu	Thr	Pro	Tyr	Val	Phe	Leu	Ser	Asp
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Ile	Glu	Gln	Leu	Gly	Leu	Gly	Ser	Arg	Arg	Lys	Ala	Ala	Leu	Val	Val
			325						330				335		
Pro	Ala	Phe	Glu	Thr	Leu	Arg	Tyr	Arg	Phe	Ser	Phe	Pro	His	Ser	Lys
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<211> 1719

<212> DNA

<213> Homo sapiens

<400> 3713

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<211> 488

<212> PRT

<213> Homo sapiens

<400> 3714

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		20						25					30		
Val	Asn	Glu	Gln	His	Ser	Gly	Ser	Asp	Thr	Gly	Ser	Val	Glu	Arg	His
		35					40					45			
Ser	Glu	Asn	Glu	Thr	Ser	Asp	Arg	Glu	Asp	Gly	Pro	Pro	Lys	Gly	His
		50				55					60				
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Asp	Ser	Glu	Ser	Glu	Glu	Leu	His	Arg	Gln	Lys	Asp	Ser	Asp	Ser	Glu
			85					90					95		
Ser	Glu	Glu	Arg	Ala	Glu	Pro	Pro	Ala	Ser	Asp	Ser	Glu	Asn	Glu	Asp
		100						105					110		
Val	Asn	Gln	His	Gly	Ser	Asp	Ser	Glu	Ser	Glu	Glu	Thr	Arg	Lys	Leu
		115				120						125			
Pro	Gly	Ser	Asp	Ser	Glu	Asn	Glu	Glu	Leu	Leu	Asn	Gly	His	Ala	Ser
	130					135					140				
Asp	Ser	Glu	Asn	Glu	Asp	Val	Gly	Lys	His	Pro	Ala	Ser	Asp	Ser	Glu

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 His Gln Ala Ser Asp Ser Glu Asn Glu Glu Pro Pro Lys Pro Arg Met
 195 200 205
 Ser Asp Ser Glu Ser Glu Glu Leu Pro Lys Pro Gln Val Ser Asp Ser
 210 215 220
 Glu Ser Glu Glu Pro Pro Arg His Gln Ala Ser Asp Ser Glu Asn Glu
 225 230 235 240
 Glu Leu Pro Lys Pro Arg Ile Ser Asp Ser Glu Ser Glu Asp Pro Pro
 245 250 255
 Arg His Gln Ala Ser Asp Ser Glu Asn Glu Glu Leu Pro Lys Pro Arg
 260 265 270
 Ile Ser Asp Ser Glu Ser Glu Asp Pro Pro Arg Asn Gln Ala Ser Asp
 275 280 285
 Ser Glu Asn Glu Glu Leu Pro Lys Pro Arg Val Ser Asp Ser Glu Ser
 290 295 300
 Glu Gly Pro Gln Lys Gly Pro Ala Ser Asp Ser Glu Thr Glu Asp Ala
 305 310 315 320
 Ser Arg His Lys Gln Lys Pro Glu Ser Asp Asp Asp Ser Asp Arg Glu
 325 330 335
 Asn Lys Gly Glu Asp Thr Glu Met Gln Asn Asp Ser Phe His Ser Asp
 340 345 350
 Ser His Met Asp Arg Lys Lys Phe His Ser Ser Asp Ser Glu Glu Glu
 355 360 365
 Glu His Lys Lys Gln Lys Met Asp Ser Asp Glu Asp Glu Lys Glu Gly
 370 375 380
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 385 390 395 400
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 405 410 415
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 420 425 430
 Glu Lys Thr Ile Ala Ser Asp Ser Glu Glu Glu Ala Gly Lys Glu Leu
 435 440 445
 Ser Asp Lys Lys Asn Glu Glu Lys Asp Leu Phe Gly Ser Asp Ser Glu
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<211> 288

<212> DNA

<213> Homo sapiens

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cacttggaga aacatcgaaa ggacaaagcc cacaaacgct atctgcta at gagcattgac
180
cagaggaaaa agatgctcaa aaacctccgt aacaccaact atgatgtctt tgagaagata
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<210> 3716

<211> 96

<212> PRT

<213> Homo sapiens

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			20				25						30		
Gly	Lys	Ile	Arg	Ser	Tyr	Glu	Glu	His	Leu	Glu	Lys	His	Arg	Lys	Asp
		35				40						45			
Lys	Ala	His	Lys	Arg	Tyr	Leu	Leu	Met	Ser	Ile	Asp	Gln	Arg	Lys	Lys
	50					55				60					
Met	Leu	Lys	Asn	Leu	Arg	Asn	Thr	Asn	Tyr	Asp	Val	Phe	Glu	Lys	Ile
65				70					75					80	
Cys	Trp	Gly	Leu	Gly	Ile	Glu	Tyr	Thr	Phe	Pro	Pro	Leu	Tyr	Tyr	Arg
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<212> DNA

<213> Homo sapiens

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180
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240
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660

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 <211> 374
 <212> PRT
 <213> Homo sapiens

<400> 3718
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 His Leu Ile Leu Asp Ser Ser Ser Lys Ile Cys Asp Leu Asn Ala Asn
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 Thr Glu Ser Glu Val Pro Gly Gly Gln Ser Val Gly Val Gln Gly Glu
 65 70 75 80
 Ala Ala Cys Val Ser Ile Pro His Leu Asp Leu Lys Asn Val Ser Asp
 85 90 95
 Gly Asp Lys Trp Glu Glu Pro Phe Pro Ala Phe Lys Ser Trp Gln Glu
 100 105 110
 Asp Ser Glu Ser Gly Glu Ala Gln Leu Ser Pro Gln Ala Gly Arg Met
 115 120 125
 Asn His His Pro Leu Glu Glu Asp Cys Pro Pro Val Leu Ser His Arg

130 135 140
 Ser Leu Asp Phe Gly Gln Ser Gln Arg Phe Leu His Asp Pro Glu Lys
 145 150 155 160
 Leu Asp Ser Ser Ser Lys Ala Leu Ser Phe Thr Arg Ile Arg Arg Ser
 165 170 175
 Ser Phe Ser Ser Lys Asp Glu Lys Arg Glu Asp Arg Thr Pro Tyr Gln
 180 185 190
 Leu Val Lys Lys Leu Gln Lys Lys Ile Arg Gln Phe Glu Glu Gln Phe
 195 200 205
 Glu Arg Glu Arg Asn Ser Lys Pro Ser Tyr Ser Asp Ile Ala Ala Asn
 210 215 220
 Pro Lys Val Leu Lys Trp Met Thr Glu Leu Thr Lys Leu Arg Lys Gln
 225 230 235 240
 Ile Lys Asp Ala Lys His Lys Asn Ser Asp Gly Glu Phe Val Pro Gln
 245 250 255
 Thr Arg Pro Arg Ser Asn Thr Leu Pro Lys Ser Phe Gly Ser Ser Leu
 260 265 270
 Asp His Glu Asp Glu Glu Asn Glu Asp Glu Pro Lys Val Ile Gln Lys
 275 280 285
 Glu Lys Lys Pro Ser Lys Glu Ala Thr Leu Glu Leu Ile Leu Lys Arg
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 305 310 315 320
 Met Thr Lys Asp His Leu Val Glu Glu Lys Ala Ser Leu Gln Lys Ser
 325 330 335
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<210> 3719

<211> 422

<212> DNA

<213> Homo sapiens

<400> 3719

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<210> 3720
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<400> 3720

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      20           25           30
Asn Gln Lys Lys Phe Glu Cys Asn Ser Arg Gln Pro Gly Cys Lys Asn
      35           40           45
Val Cys Phe Asp Asp Phe Phe Pro Ile Ser Gln Val Arg Leu Trp Ala
      50           55           60
Leu Gln Leu Ile Met Val Ser Thr Pro Ser Leu Leu Val Val Leu His
      65           70           75           80
Val Ala Tyr His Glu Gly Arg Glu Lys Arg His Arg Lys Lys Leu Tyr
      85           90           95
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      100          105          110
Ser Leu Ile Val Lys Thr Gly Phe Glu Thr
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<210> 3721
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720

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<210> 3722

<211> 1216

<212> PRT

<213> Homo sapiens

<400> 3722

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		20						25				30			
Ala	Tyr	Pro	Phe	Asn	Ala	Lys	Gln	Pro	Thr	Asp	Met	Ala	Arg	Arg	Gln
		35					40				45				
Gln	Lys	Ile	Ser	Lys	Gln	Gln	Leu	Gln	Thr	Val	Lys	Asp	Arg	Phe	Gln
	50					55				60					
Ala	Phe	Leu	Asn	Gly	Glu	Thr	Gln	Ile	Met	Ala	Asp	Glu	Ala	Phe	Met
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Asn	Ala	Val	Gln	Ser	Tyr	Tyr	Glu	Val	Phe	Leu	Lys	Ser	Asp	Arg	Val
			85					90					95		
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Asp	Gly	Leu	Ser	Lys	Glu	Thr	Val	Leu	Ser	Ser	Trp	Met	Ala	Lys	Phe
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Asp	Ala	Ile	Tyr	Arg	Gly	Glu	Glu	Asp	Pro	Arg	Lys	Gln	Gln	Ala	Arg
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Met	Thr	Ala	Ser	Ala	Ala	Ser	Glu	Leu	Ile	Leu	Ser	Lys	Glu	Gln	Leu

2871

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 625 630 635 640
 Leu Leu Glu Arg Ala Glu Asn Gly Ala Met Ile Asp Pro Thr Leu Leu
 645 650 655
 His Tyr Ser Phe Ala Phe Cys Ala Ser His Val His Gly Asn Arg Pro
 660 665 670
 Asp Gly Ile Gly Thr Val Thr Val Glu Glu Lys Glu Arg Phe Glu Glu
 675 680 685
 Ile Lys Glu Arg Leu Arg Val Leu Leu Glu Asn Gln Ile Thr His Phe
 690 695 700
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 Pro Gln Glu Glu Val Lys Thr Val Ile Arg Lys Cys Leu Glu Gln Ala
 740 745 750
 Ala Leu Val Asn Tyr Ser Arg Leu Ser Glu Tyr Ala Lys Ile Glu Glu
 755 760 765
 Asn Gln Lys Asp Ala Glu Asn Val Gly Arg Leu Ile Thr Pro Ala Lys
 770 775 780
 Lys Leu Glu Asp Thr Ile Arg Leu Ala Glu Leu Val Ile Glu Val Leu
 785 790 795 800
 Gln Gln Asn Glu Glu His His Ala Glu Pro His Val Asp Lys Gly Glu
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 Ala Phe Ala Trp Trp Ser Asp Leu Met Val Glu His Ala Glu Thr Phe
 820 825 830
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 Pro Asp Thr Trp Asp Ser Phe Pro Leu Phe Gln Leu Leu Asn Asp Phe
 850 855 860
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 865 870 875 880
 Gln Asp Leu Phe Ala Pro Leu Val Val Arg Tyr Val Asp Leu Met Glu
 885 890 895
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 915 920 925
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 930 935 940
 Glu Phe Gly Lys His Leu Glu Gln Arg Leu Lys Leu Met Ala Ser Asp
 945 950 955 960
 Met Ile Glu Ser Cys Val Lys Arg Thr Arg Ile Ala Phe Glu Val Lys
 965 970 975
 Leu Gln Lys Thr Ser Arg Ser Thr Asp Phe Arg Val Pro Gln Ser Ile
 980 985 990
 Cys Thr Met Phe Asn Val Met Val Asp Ala Lys Ala Gln Ser Thr Lys
 995 1000 1005
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 Tyr His Ser Lys Ile Asp Glu Leu Ile Glu Glu Thr Val Lys Glu Met

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 1060 1065 1070
 Ser Phe Thr Val Lys Ala Ala Ser Lys Tyr Val Asp Val Pro Lys Pro
 1075 1080 1085
 Gly Met Asp Val Ala Asp Ala Tyr Val Thr Phe Val Arg His Ser Gln
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 1125 1130 1135
 Thr Asp Arg Met Asp Leu Gln Leu His Ile Tyr Gln Leu Lys Thr Leu
 1140 1145 1150
 Ile Arg Met Val Lys Lys Thr Tyr Arg Asp Phe Arg Leu Gln Gly Val
 1155 1160 1165
 Leu Asp Ser Thr Leu Asn Ser Lys Thr Tyr Glu Thr Ile Arg Asn Arg
 1170 1175 1180
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<210> 3723

<211> 830

<212> DNA

<213> Homo sapiens

<400> 3723

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 aaccccaacg agaagctgaa ggtgaacttt gggaccccag agttcctgtc acctgagggtg
 180
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<210> 3724
 <211> 203
 <212> PRT
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<400> 3724
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 Asp Phe Gly Leu Ala Arg Arg Tyr Asn Pro Asn Glu Lys Leu Lys Val
 35 40 45
 Asn Phe Gly Thr Pro Glu Phe Leu Ser Pro Glu Val Val Asn Tyr Asp
 50 55 60
 Gln Ile Ser Asp Lys Thr Asp Met Trp Ser Met Gly Val Ile Thr Tyr
 65 70 75 80
 Met Leu Leu Ser Gly Leu Ser Pro Phe Leu Gly Asp Asp Asp Thr Glu
 85 90 95
 Thr Leu Asn Asn Val Leu Ser Gly Asn Trp Tyr Phe Asp Glu Glu Thr
 100 105 110
 Phe Glu Ala Val Ser Asp Glu Ala Lys Asp Phe Val Ser Asn Leu Ile
 115 120 125
 Val Lys Asp Gln Arg Ala Arg Met Asn Ala Ala Gln Cys Leu Ala His
 130 135 140
 Pro Trp Leu Asn Asn Leu Ala Glu Lys Ala Lys Arg Cys Asn Arg Arg
 145 150 155 160
 Leu Lys Ser Gln Ile Leu Leu Lys Lys Tyr Leu Met Lys Arg Arg Trp
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 Lys Lys Asn Phe Ile Ala Val Ser Ala Ala Asn Arg Phe Lys Lys Ile
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<210> 3725
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 <212> DNA
 <213> Homo sapiens

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 240
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 300

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 420
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 480
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<210> 3726

<211> 325

<212> PRT

<213> Homo sapiens

<400> 3726

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		20						25					30		
Gly	Arg	Glu	Leu	Asp	Phe	Arg	Ser	Asp	His	Leu	His	Phe	Cys	Phe	Gln
		35						40					45		
Ala	Phe	Lys	Ile	Val	Pro	Tyr	Asn	Thr	Glu	Thr	Leu	Asp	Lys	Leu	Leu
	50					55					60				
Thr	Glu	Ser	Leu	Lys	Asn	Ile	Pro	Ala	Ser	Gly	Leu	His	Leu	Phe	
65				70					75					80	
Gly	Ile	Asn	Gln	Leu	Glu	Glu	Glu	Asp	Met	Met	Thr	Asn	Gln	Arg	Asp
			85						90				95		
Glu	Glu	Leu	Pro	Thr	Leu	Leu	His	Phe	Ala	Ala	Lys	Tyr	Gly	Leu	Lys
			100					105					110		
Asn	Leu	Thr	Ala	Leu	Leu	Leu	Thr	Cys	Pro	Gly	Ala	Leu	Gln	Ala	Tyr

115 120 125
 Ser Val Ala Asn Lys His Gly His Tyr Pro Asn Thr Ile Ala Glu Lys
 130 135 140
 His Gly Phe Arg Asp Leu Arg Gln Phe Ile Asp Glu Tyr Val Glu Thr
 145 150 155 160
 Val Asp Met Leu Lys Ser His Ile Lys Glu Glu Leu Met His Gly Glu
 165 170 175
 Glu Ala Asp Ala Val Tyr Glu Ser Met Ala His Leu Ser Thr Asp Leu
 180 185 190
 Leu Met Lys Cys Ser Leu Asn Pro Gly Cys Asp Glu Asp Leu Tyr Glu
 195 200 205
 Ser Met Ala Ala Phe Val Pro Ala Ala Thr Glu Asp Leu Tyr Val Glu
 210 215 220
 Met Leu Gln Ala Ser Thr Ser Asn Pro Ile Pro Gly Asp Gly Phe Ser
 225 230 235 240
 Arg Ala Thr Lys Asp Ser Met Ile Arg Lys Phe Leu Glu Gly Asn Ser
 245 250 255
 Met Gly Met Thr Asn Leu Glu Arg Asp Gln Cys His Leu Gly Gln Glu
 260 265 270
 Glu Asp Val Tyr His Thr Val Asp Asp Asp Glu Ala Phe Ser Val Asp
 275 280 285
 Leu Ala Ser Arg Pro Pro Val Pro Val Pro Arg Pro Glu Thr Thr Ala
 290 295 300
 Pro Gly Ala His Gln Leu Pro Asp Asn Glu Pro Tyr Ile Phe Lys Gly
 305 310 315 320
 Lys Tyr Gly Arg Glu
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<210> 3727

<211> 630

<212> DNA

<213> Homo sapiens

<400> 3727

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 240
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 360
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 420
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 480
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630

<210> 3728

<211> 210

<212> PRT

<213> Homo sapiens

<400> 3728

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20 25 30
Val Thr Pro Thr Pro Ala Gly Thr Leu Asp Pro Ala Glu Lys Gln Glu
35 40 45
Thr Gly Cys Pro Pro Leu Gly Leu Glu Ser Leu Arg Val Ser Asp Ser
50 55 60
Arg Leu Glu Ala Ser Ser Ser Gln Ser Phe Gly Leu Gly Pro His Arg
65 70 75 80
Gly Arg Leu Asn Ile Gln Ser Gly Leu Glu Asp Gly Asp Leu Tyr Asp
85 90 95
Gly Ala Trp Cys Ala Glu Glu Gln Asp Ala Asp Pro Trp Phe Gln Val
100 105 110
Asp Ala Gly His Pro Thr Arg Phe Ser Gly Val Ile Thr Gln Gly Arg
115 120 125
Asn Ser Val Trp Arg Tyr Asp Trp Val Thr Ser Tyr Lys Val Gln Phe
130 135 140
Ser Asn Asp Ser Arg Thr Trp Trp Gly Ser Arg Asn His Ser Ser Gly
145 150 155 160
Met Asp Ala Val Phe Pro Ala Asn Ser Asp Pro Glu Thr Pro Val Leu
165 170 175
Asn Leu Leu Pro Glu Pro Gln Val Ala Arg Phe Ile Arg Leu Leu Pro
180 185 190
Gln Thr Trp Leu Gln Gly Gly Ala Pro Cys Leu Arg Ala Glu Ile Leu
195 200 205
Ala Cys
210

<210> 3729

<211> 1552

<212> DNA

<213> Homo sapiens

<400> 3729

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120
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180
tggttagagt cctcagaagc atgtgtcttc cccagctctg cagccacata ctatccgttt
240
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300

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 360
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 420
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 480
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 540
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 600
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 660
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 720
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 780
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 840
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 aataacccaa atgaatctgt aactgcta atgctctacc attctccttc atgtacaaga
 960
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 1020
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 1080
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 1140
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 1200
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<210> 3730

<211> 422

<212> PRT

<213> Homo sapiens

<400> 3730

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Ile	Thr	Leu	His	Pro	Tyr	Ala	Tyr	Ser	Pro	Tyr	Thr	Leu	Asp	Ser	Thr
			20					25					30		
Gln	Asn	Val	Tyr	Ser	Val	Pro	Gly	Ser	Gln	Tyr	Leu	Tyr	Asn	Gln	Pro


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  65      70      75      80
Asp Glu Lys Lys Thr Tyr Asp Gln Gln Lys Phe Asp Ser Glu Arg Ala
      85      90      95
Asp Gly Thr Ile Ser Ser Glu Ile Lys Ser Ala Arg Gly Ser His His
      100      105      110
Leu Ser Ile Tyr Ala Glu Asn Ser Leu Lys Ser Asp Gly Tyr His Lys
      115      120      125
Arg Thr Asp Arg Lys Ser Arg Ile Ile Ala Lys Asn Val Ser Thr Ser
      130      135      140
Lys Pro Glu Phe Glu Phe Thr Thr Leu Asp Phe Pro Glu Leu Gln Gly
      145      150      155      160
Ala Glu Asn Asn Met Ser Glu Ile Gln Lys Gln Pro Lys Trp Gly Pro
      165      170      175
Val His Ser Val Ser Thr Asp Ile Ser Leu Leu Arg Glu Val Val Lys
      180      185      190
Pro Ala Ala Val Leu Ser Lys Gly Glu Ile Val Val Lys Asn Asn Pro
      195      200      205
Asn Glu Ser Val Thr Ala Asn Ala Ala Thr Asn Ser Pro Ser Cys Thr
      210      215      220
Arg Glu Leu Ser Trp Thr Pro Met Gly Tyr Val Val Arg Gln Thr Leu
      225      230      235      240
Ser Thr Glu Leu Ser Ala Ala Pro Lys Asn Val Thr Ser Met Ile Asn
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Leu Lys Thr Ile Ala Ser Ser Ala Asp Pro Lys Asn Val Ser Ile Pro
      260      265      270
Ser Ser Glu Ala Leu Ser Ser Asp Pro Ser Tyr Asn Lys Glu Lys His
      275      280      285
Ile Ile His Pro Thr Gln Lys Ser Lys Ala Ser Gln Gly Ser Asp Leu
      290      295      300
Glu Gln Asn Glu Ala Ser Arg Lys Asn Lys Lys Lys Lys Glu Lys Ser
      305      310      315      320
Thr Ser Lys Tyr Glu Val Leu Thr Val Gln Glu Pro Pro Arg Ile Glu
      325      330      335
Asp Ala Glu Glu Phe Pro Asn Leu Ala Val Ala Ser Glu Arg Arg Asp
      340      345      350
Arg Ile Glu Thr Pro Lys Phe Gln Ser Lys Gln Gln Pro Gln Asp Asn
      355      360      365
Phe Lys Asn Asn Val Lys Lys Ser Gln Leu Pro Val Gln Leu Asp Leu
      370      375      380
Gly Gly Met Leu Thr Ala Leu Glu Lys Lys Gln His Ser Gln His Ala
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Leu Ser Lys Glu Cys Ala
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<210> 3731

<211> 1704

<212> DNA

<213> Homo sapiens

<400> 3731

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1560

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<210> 3732
 <211> 281
 <212> PRT
 <213> Homo sapiens

<400> 3732
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 Glu Gly Ile Thr Asp Ala Ser Ser Cys Ala Val Leu Leu Pro Ala Ser
 35 40 45
 Leu Phe Val Asn Ser His Pro Gly Ile Asp Arg Pro Gly Met Leu Cys
 50 55 60
 Ser Phe Arg Ile Pro Gly Ala Trp Ser Cys Ala Trp Ser Leu Asn Ile
 65 70 75 80
 Gln Ala Asn Asn Cys Phe Ser Thr Gly Leu Ser Arg Arg Val Leu Leu
 85 90 95
 Thr Asn Val Val Thr Gly His Arg Gln Ser Phe Gly Thr Asn Ser Asp
 100 105 110
 Val Leu Ala Gln Gln Phe Ala Leu Met Ala Pro Leu Leu Phe Asn Gly
 115 120 125
 Cys Arg Ser Gly Glu Ile Phe Ala Ile Asp Leu Arg Cys Gly Asn Gln
 130 135 140
 Gly Lys Gly Trp Lys Ala Thr Arg Leu Phe His Asp Ser Ala Val Thr
 145 150 155 160
 Ser Val Arg Ile Leu Gln Asp Glu Gln Tyr Leu Met Ala Ser Asp Met
 165 170 175
 Ala Gly Lys Ile Lys Leu Trp Asp Leu Arg Thr Thr Lys Cys Val Arg
 180 185 190
 Gln Tyr Glu Gly His Val Asn Glu Tyr Ala Tyr Leu Pro Leu His Val
 195 200 205
 His Glu Glu Glu Gly Ile Leu Val Ala Val Gly Gln Asp Cys Tyr Thr
 210 215 220
 Arg Ile Trp Ser Leu His Asp Ala Arg Leu Leu Arg Thr Ile Pro Ser
 225 230 235 240
 Pro Tyr Pro Ala Ser Lys Ala Asp Ile Pro Ser Val Ala Phe Ser Ser
 245 250 255
 Arg Leu Gly Gly Ser Arg Gly Ala Pro Gly Leu Leu Met Ala Val Gly
 260 265 270
 Gln Asp Leu Tyr Cys Tyr Ser Tyr Ser
 275 280

<210> 3733
 <211> 515
 <212> DNA
 <213> Homo sapiens

<400> 3733

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<210> 3734

<211> 171

<212> PRT

<213> Homo sapiens

<400> 3734

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Val	Ser	Gly	Ser	Arg	Tyr	Arg	Arg	Gly	Arg	Arg	Arg	Gly	Arg	Leu	Lys
		20						25					30		
Gly	Lys	Asp	Pro	Gly	Ser	Ala	Pro	Ser	Ser	Val	Arg	Glu	Arg	Glu	Thr
	35						40				45				
Pro	Gly	Ala	Xaa	Pro	Cys	Leu	Pro	Arg	Arg	Gly	Trp	Cys	Val	Pro	Gly
	50				55					60					
Asp	Val	Arg	Ser	Ser	Pro	Pro	Leu	Pro	Gly	Trp	Cys	Ala	Leu	Ser	Asp
65					70				75					80	
Val	Arg	Ser	Arg	Gly	Arg	Ser	Cys	Pro	Ser	Ala	Pro	Lys	Ala	Ala	Gly
			85						90					95	
Gly	Leu	Arg	Ala	Trp	Gly	Arg	Gly	Ser	Gly	Ala	Ala	Arg	Ala	Pro	Ala
	100						105						110		
Pro	Ala	Pro	Ser	Pro	Ser	Ser	Gly	Xaa	Ser	Pro	Ser	Ser	Arg	Thr	Pro
	115						120					125			
Arg	Asp	Trp	Ser	Ala	Ser	Arg	Cys	Trp	Thr	Trp	Ser	Gly	Ala	Ala	Thr
	130					135					140				
Ala	Pro	Thr	Pro	Phe	Ser	Pro	Ala	Gln	Gln	Pro	Pro	Ser	Ser	His	Asp
145					150					155				160	
Gly	Leu	Ser	Leu	Asp	Pro	Ser	Gln	Leu	Glu	Pro					
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<210> 3735

<211> 2512

<212> DNA

<213> Homo sapiens

<400> 3735

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180
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240
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300
aagaggaaac ggagaagaac ctggaaaagg tacagactat cattgaacat ctgcaggaaa
360
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420
accatgttga gagctaccga accatgcccc tttaccctac ctacaatgaa gtgcacttgg
480
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540
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720
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840
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<210> 3736

<211> 155

<212> PRT

<213> Homo sapiens

<400> 3736

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Ser	Gly	Arg	Pro	Ser	Ala	Thr	Gln	Lys	Lys	Lys	Met	Lys	Lys	Arg	Val
			20					25						30	
Lys	Asp	Glu	Leu	Arg	Lys	Leu	Asn	Thr	Met	Pro	Ala	Ala	Glu	Ala	Asn
			35				40						45		
Glu	Ile	Glu	Asp	Val	Trp	His	Leu	Asp	Leu	Ser	Ser	Arg	Trp	Gln	Leu
			50			55				60					
Tyr	Arg	Leu	Trp	Leu	Gln	Leu	Tyr	Gln	Ala	Asp	Thr	Pro	Pro	Gly	Lys
65					70					75				80	
Ile	Leu	Ser	Tyr	Glu	Arg	Gln	Tyr	Arg	Thr	Ser	Ala	Glu	Arg	Met	Ala
			85					90						95	
Glu	Leu	Arg	Leu	Gln	Glu	Asp	Leu	His	Ile	Leu	Lys	Asp	Ala	Gln	Val
			100					105					110		
Val	Gly	Met	Thr	Thr	Thr	Gly	Ala	Ala	Lys	Tyr	Arg	Gln	Ile	Leu	Gln

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 Lys Val Glu Pro Arg Ile Val Ile Val Glu Glu Ala Ala Glu Val Leu
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 Glu Ala His Thr Ile Ala Thr Leu Ser Lys Ala
 145 150 155

<210> 3737
 <211> 1046
 <212> DNA
 <213> Homo sapiens

<400> 3737
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 240
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 420
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 720
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 780
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 900
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 1046

<210> 3738
 <211> 348
 <212> PRT
 <213> Homo sapiens

<400> 3738

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 Gly Leu Gln Ala Val Pro Val Gly Ile Pro Ala Ala Ser Gln Arg Ile
 35 40 45
 Phe Leu His Gly Asn Arg Ile Ser His Val Pro Ala Ala Ser Phe Arg
 50 55 60
 Ala Cys Arg Asn Leu Thr Ile Leu Trp Leu His Ser Asn Val Leu Ala
 65 70 75 80
 Arg Ile Asp Ala Ala Phe Thr Gly Leu Ala Leu Leu Gly Ala Leu
 85 90 95
 Asp Leu Ser Asp Asn Ala Gln Leu Arg Ser Val Asp Pro Ala Thr Phe
 100 105 110
 His Gly Leu Gly Arg Leu His Thr Leu His Leu Asp Arg Cys Gly Leu
 115 120 125
 Gln Glu Leu Gly Pro Gly Leu Phe Arg Gly Leu Ala Ala Leu Gln Tyr
 130 135 140
 Leu Tyr Leu Gln Asp Asn Ala Leu Gln Ala Leu Pro Asp Asp Thr Phe
 145 150 155 160
 Arg Asp Leu Gly Asn Leu Thr His Leu Phe Leu His Gly Asn Arg Ile
 165 170 175
 Ser Ser Val Pro Glu Arg Ala Phe Arg Gly Leu His Ser Leu Asp Arg
 180 185 190
 Leu Leu Leu His Gln Asn Arg Val Ala His Val His Pro His Ala Phe
 195 200 205
 Arg Asp Leu Gly Arg Leu Met Thr Leu Tyr Leu Phe Ala Asn Asn Leu
 210 215 220
 Ser Ala Leu Pro Thr Glu Ala Leu Ala Pro Leu Arg Ala Leu Gln Tyr
 225 230 235 240
 Leu Arg Leu Asn Asp Asn Pro Trp Val Cys Asp Cys Arg Ala Arg Pro
 245 250 255
 Leu Trp Ala Trp Leu Gln Lys Phe Arg Gly Ser Ser Ser Glu Val Pro
 260 265 270
 Cys Ser Leu Pro Gln Arg Leu Ala Gly Arg Asp Leu Lys Arg Leu Ala
 275 280 285
 Ala Asn Asp Leu Gln Gly Cys Ala Val Ala Thr Gly Pro Tyr His Pro
 290 295 300
 Ile Trp Thr Gly Arg Ala Thr Asp Glu Glu Pro Leu Gly Leu Pro Lys
 305 310 315 320
 Cys Cys Gln Pro Asp Ala Ala Asp Lys Ala Ser Val Leu Glu Pro Gly
 325 330 335
 Arg Pro Ala Ser Ala Gly Asn Ala Leu Lys Gly Arg
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<210> 3739

<211> 1252

<212> DNA

<213> Homo sapiens

<400> 3739

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 120
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 180
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 360
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 420
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 480
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 540
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 600
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 660
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 720
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<210> 3740

<211> 139

<212> PRT

<213> Homo sapiens

<400> 3740

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 20 25 30
 Ser Thr Glu Ala Pro Gly His Pro Gln Glu Asp Gly Lys Gly Gln Leu
 35 40 45
 Ala Gly Glu Ser Pro Gly His Arg Glu Pro Ser Pro Gly Ser Lys Gln

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      50              55              60
Asp Leu Pro Ser Asp Cys Leu Arg Asn Ala Gly Trp Thr Ser Arg Asn
65              70              75              80
Phe Pro Phe Thr Gly Gln Pro Ala Ala Ala Pro Pro Arg Leu Gly Pro
      85              90              95
Ala Pro Gly Ala Ala Asp Arg Pro Ser Arg Val Pro Lys Ser Pro Ala
      100              105              110
Leu Ala Gln Lys Leu Gly Gln Pro Arg Asp Pro His Leu Pro Leu Pro
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Ile Ser Pro Leu Ser Gln Pro Pro Pro Ser Pro
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<210> 3741
 <211> 562
 <212> DNA
 <213> Homo sapiens

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<400> 3741
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120
cggcagatcg gtgcctcctg aatcccccac aaaattccca ctgggaatgt gttcctgaaa
180
gagctgcccc ggcttgagaa agcctctttt cagaccaaac ttcgtattca aagctcaaaa
240
agaactgcac acaattagga cagtcataca agatgctgcc cctaactctg ccacaatctg
300
cgagaaggga ggcggggcct cgcagggcaa agtgcccctg ggaagggatc cgcaggggaa
360
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420
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562

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<210> 3742
 <211> 138
 <212> PRT
 <213> Homo sapiens

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<400> 3742
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Pro Ala Arg Ala Cys Ser Pro Arg Gly Trp Gly Leu Trp Ser Phe Gln
      35              40              45
Ser Cys Ser Leu Arg Ile Pro Ser Gln Gly His Phe Ala Leu Gly Ser
      50              55              60
Pro Ala Ser Leu Leu Ala Asp Cys Gly Arg Ile Arg Gly Ser Ile Leu

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65					70						75				80
Tyr	Asp	Cys	Pro	Asn	Cys	Val	Gln	Phe	Phe	Leu	Ser	Phe	Glu	Tyr	Glu
				85					90				95		
Val	Trp	Ser	Glu	Lys	Arg	Leu	Ser	Gln	Ala	Trp	Ala	Ala	Leu	Ser	Gly
			100					105					110		
Thr	His	Ser	Gln	Trp	Glu	Phe	Trp	Val	Gly	Phe	Arg	Arg	His	Arg	Ser
		115					120					125			
Ala	Gly	Glu	Gly	Phe	Leu	Gly	Thr	Gln	Gly						
	130					135									

<210> 3743

<211> 468

<212> DNA

<213> Homo sapiens

<400> 3743

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180
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240
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360
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468

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<210> 3744

<211> 134

<212> PRT

<213> Homo sapiens

<400> 3744

Xaa	His	Glu	Pro	Ser	Tyr	Lys	Leu	His	Phe	Gly	Lys	Ala	Leu	Thr	Met
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Ala	Glu	Ala	Glu	Gly	Asn	Ala	Ser	Cys	Thr	Val	Ser	Leu	Gly	Gly	Ala
			20					25					30		
Asn	Met	Ala	Glu	Thr	His	Lys	Ala	Met	Ile	Leu	Gln	Leu	Asn	Pro	Ser
		35					40					45			
Glu	Asn	Cys	Thr	Trp	Thr	Ile	Glu	Arg	Pro	Glu	Asn	Lys	Ser	Ile	Arg
	50				55					60					
Ile	Ile	Phe	Ser	Tyr	Val	Gln	Leu	Asp	Pro	Asp	Gly	Ser	Cys	Glu	Ser
65					70				75					80	
Glu	Asn	Ile	Lys	Val	Phe	Asp	Gly	Thr	Ser	Ser	Asn	Gly	Pro	Leu	Leu
			85					90					95		
Gly	Gln	Val	Cys	Ser	Lys	Asn	Asp	Tyr	Val	Pro	Val	Phe	Glu	Ser	Ser
			100					105					110		
Ser	Ser	Thr	Leu	Thr	Phe	Gln	Ile	Val	Thr	Asp	Ser	Ala	Arg	Ile	Gln

115
Arg Thr Val Phe Val Phe
130

120

125

<210> 3745
<211> 345
<212> DNA
<213> Homo sapiens

<400> 3745
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gacgctgtgg gagaggaaaa cagccacatg tgggctggct gcttggagga gacacatgag
120
ccgtgaacac gtctcccccg gccgtccct ggttccatgc gtgctcgtct tgggcaccac
180
gagaacacag ccatgcagcc cccgatcctg cagccacagc cacggcatcg cctggtcgga
240
tgcagcatct gctccggacg cctctcgtg tgggtgccag gcctgccagg ccaagccccg
300
attctcaggg gggcaggag gtgggaggca cgtttgggcg gatcc
345

<210> 3746
<211> 102
<212> PRT
<213> Homo sapiens

<400> 3746
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Thr Cys Gly Leu Ala Ala Trp Arg Arg His Met Ser Arg Glu His Val
20 25 30
Ser Pro Gly Arg Ser Leu Val Pro Cys Val Leu Val Leu Gly Thr Thr
35 40 45
Arg Thr Gln Pro Cys Ser Pro Arg Ser Cys Ser His Ser His Gly Ile
50 55 60
Ala Trp Ser Asp Ala Ala Ser Ala Pro Asp Ala Ser Arg Cys Arg Cys
65 70 75 80
Gln Ala Cys Gln Ala Lys Pro Arg Phe Ser Gly Ala Ala Gly Gly Gly
85 90 95
Arg His Val Trp Ala Asp
100

<210> 3747
<211> 800
<212> DNA
<213> Homo sapiens

<400> 3747
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cgcgccggac cctgggatgc tcttcggccg catcccgtg cgctacgcca tactggtgag
120

aagggggcgc gcccgccac tttctgctg agccccgcac cctctctggt ggtctctct
 180
 ggggcgcccc tgccaatccc cgcttcccc tcccgcagat gcagatgcgc ttcgatggac
 240
 gcctgggctt ccccgccgga ttcgtggaca cgcaggacag aagcctagag gacgggctga
 300
 accgcgagct gcgcgaggag ctgggcgaag cggctgccgc tttccgcgtg gacgcactg
 360
 actaccgcag ctcccacgtc ggggtcaggg ccacgcgttg tggcccactt ctatgccaa
 420
 cgtctgacgc tcgaggagct gttggctgtg gaggccggcg caacacggcg caaggaccac
 480
 gggctggagg tgggaccagc ctgggactct gtccctttcc caatttctc tttcccaaa
 540
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 600
 tctccccagc tttcttggtg gagttgggat cgtgatcacc tatactctga attagtactg
 660
 ccaacctggg cttctgttaa aggtctttcc caccctttac caggagagat cttttctaga
 720
 acacactcat ccattgtctt ctgctgttcc ctattgacag tgtgatagat tatcacatta
 780
 tctaggtgtg gcaacctagg
 800

<210> 3748

<211> 138

<212> PRT

<213> Homo sapiens

<400> 3748

Met	Gln	Met	Arg	Phe	Asp	Gly	Arg	Leu	Gly	Phe	Pro	Gly	Gly	Phe	Val
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Asp	Thr	Gln	Asp	Arg	Ser	Leu	Glu	Asp	Gly	Leu	Asn	Arg	Glu	Leu	Arg
		20						25					30		
Glu	Glu	Leu	Gly	Glu	Ala	Ala	Ala	Ala	Phe	Arg	Val	Glu	Arg	Thr	Asp
		35				40						45			
Tyr	Arg	Ser	Ser	His	Val	Gly	Val	Arg	Ala	Thr	Arg	Cys	Gly	Pro	Leu
	50				55					60					
Leu	Cys	Gln	Ala	Ser	Asp	Ala	Arg	Gly	Ala	Val	Gly	Cys	Gly	Gly	Arg
65				70						75				80	
Arg	Asn	Thr	Arg	Gln	Gly	Pro	Arg	Ala	Gly	Gly	Gly	Thr	Ser	Leu	Gly
			85					90						95	
Leu	Cys	Pro	Phe	Pro	Asn	Phe	Leu	Phe	Ser	Gln	Ser	Phe	Leu	Ser	Pro
		100						105					110		
Lys	Lys	Ala	Ser	Leu	Glu	Lys	Ser	Leu	Cys	Pro	Ser	Asp	Leu	Ala	Leu
		115				120						125			
Ser	Pro	Ala	Phe	Leu	Val	Glu	Leu	Gly	Ser						
		130				135									

<210> 3749

<211> 648

<212> DNA

<213> Homo sapiens

<400> 3749

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 120
 ggctactcca tgcctcggga gggatcgaca agcaagcaga tgccccccag tgatgctgaa
 180
 ggtgaccgcg tgatgaacat gctgatgagg ctgcaggagg cagccaacta ctccagcccc
 240
 cagagctatg acagcgactc caacagcaac agccatcacg atgacatctt ggactcctct
 300
 ttggagtcca ctctgtgaca ggggcccggg gcccgagcgc ctctcttctt cctcaccgca
 360
 ttccacctgc atccccacaca tcacctgaa gatgacttcc tgagccagcc cccagccaca
 420
 gccttagagc tgcgggaaca ccgagacccc ccgtccttca gctcgacct ggggtgcaggc
 480
 atcccgggcc agctgcctgc ggaccgcttc cttccacagc gagaactgca ctaccttctg
 540
 ttgtacttta attattgttt tgccttgttg ctgtgacctc cctaagacac tgaagatact
 600
 tctcgggaaa ggatcatcgc cgttgaaatg aaaaaaaaaa aaaaaaaaa
 648

<210> 3750

<211> 105

<212> PRT

<213> Homo sapiens

<400> 3750

Arg	Ala	Pro	Trp	Glu	Asp	Pro	Ala	Lys	Trp	Val	Met	Asp	Thr	Tyr	Pro
1				5					10					15	
Trp	Ala	Ala	Ser	Pro	Gln	Gln	His	Glu	Trp	Pro	Pro	Leu	Leu	Gln	Leu
			20					25					30		
Arg	Pro	Glu	Asp	Val	Gly	Phe	Asp	Gly	Tyr	Ser	Met	Pro	Arg	Glu	Gly
		35					40					45			
Ser	Thr	Ser	Lys	Gln	Met	Pro	Pro	Ser	Asp	Ala	Glu	Gly	Asp	Pro	Leu
	50					55					60				
Met	Asn	Met	Leu	Met	Arg	Leu	Gln	Glu	Ala	Ala	Asn	Tyr	Ser	Ser	Pro
65					70				75					80	
Gln	Ser	Tyr	Asp	Ser	Asp	Ser	Asn	Ser	Asn	Ser	His	His	Asp	Asp	Ile
			85					90						95	
Leu	Asp	Ser	Ser	Leu	Glu	Ser	Thr	Leu							
			100					105							

<210> 3751

<211> 554

<212> DNA

<213> Homo sapiens

<400> 3751

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 60

cctggccccg ctgctgctcg cggtcgggtc gccccgagcg gggccaaggg cgtttcctac
 120
 acgcagggcc agagtccgga gccgcggacc cgcgaggtat ttctactacg tggaccacca
 180
 gggccagctt ttcttgatg attccaaaat gaagaatttc atcacctgct tcaaagacct
 240
 gcagttcctg gtcaccttct tctccgcct gagaccaac cgcagcgggc gctacgaggc
 300
 cgctttcccc ttctctcgc cctgcggcag agagcgcaac ttctgcgct gcgaggaccg
 360
 gccggtgggc ttcacgcacc tgctgaccgc ggaccacggg cctccgcgc tctctactg
 420
 cggcgggtggc gaggccctgg ccgtgccctt cgagccggcg cgctgctgc cctgggccg
 480
 caacgggcgc ctgtaccacc cggcgccgga gcgtgcgggc ggcgtgggccc tgggtgcgc
 540
 ttcccccctg gcc
 554

<210> 3752

<211> 66

<212> PRT

<213> Homo sapiens

<400> 3752

Ala	Arg	Leu	Ser	Ala	Leu	Ala	Arg	Ala	Leu	Ala	Gly	Pro	Pro	Pro	Arg
1				5					10					15	
Pro	His	His	Gly	Pro	Gly	Pro	Ala	Ala	Ala	Arg	Gly	Ser	Val	Ala	Pro
			20				25						30		
Ser	Gly	Ala	Lys	Gly	Val	Ser	Tyr	Thr	Gln	Gly	Gln	Ser	Pro	Glu	Pro
		35				40						45			
Arg	Thr	Arg	Glu	Val	Phe	Leu	Leu	Arg	Gly	Pro	Pro	Gly	Pro	Ala	Phe
	50					55						60			
Pro	Gly														
65															

<210> 3753

<211> 1426

<212> DNA

<213> Homo sapiens

<400> 3753

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 gaacccactc tcctaaccga cccccgagag gcggagagaa tgtgggagca cttcagagag
 120
 gctaggctc cggagatcgg gccatctggg ctctgaaagc aaattagttt tccaactcat
 180
 gtctggctcc ggcgttacc agacgcctgg aaggtcctc ctgcagtctg atcaccattt
 240
 ttctgctgc actgaccaat cagctccctt tggccttcaa cctcgggaat gatggattag
 300
 gggagtctag aaatggacga agccctagaa acgcagctga agacgagcag aggacgcttc
 360

tcggctacag aatccctccc caccttggag ctcttatctc aggtggacat ggactgcagg
 420
 gtccacatgc gaccatcgg cctgacgtgg gtgctgcaac tgacctggc atggatcctg
 480
 ctagaagcct gtggaggag cgcccactc caagccaggc cccagcaaca ccatgggctg
 540
 gcagctgac tgggcaaagg caagctgcac ctggcaggac cttgtgtcc ctcagagatg
 600
 gacacaacag agacatcggg ccctggaaac catccagaac gctgtggagt gccgagccct
 660
 gaatgcgaat ccttcctgga acacctccaa cgtgcccttc gcagtcgctt ccgctgcgg
 720
 ctattggggg tacgccaggc acagccgctc tgcgaggagc tctgccaggc ctgggtcgcc
 780
 aactgcgaag atgatatac ctgcggcccc acttggtcc cactctcaga aaaaaggggc
 840
 tgtgagccca gctgccttac ctatggacag accttcgcag acgggacgga ctttgtcgc
 900
 tcggctctgg gccacgccct accggtggct gctcctggag ccgctcactg cttcaacatc
 960
 tccatctcgg cggtaacctg tcccagacca ggacgacggg gccgggaagc tccctcccg
 1020
 cgttcccgca gccctgcac ctccatcctg gacgtgcgg gcagcgggag tggcagtgga
 1080
 agcggcagcg gccctagcg gacgcgtggc cctgagttgg gggagcgacc cttccccag
 1140
 ccccgccct caggacacc agaaccac cctcgtcct ctcggccttc tgtaatagtt
 1200
 ttgagatgtc tgccctcct ccctggagct ccagagaccc accctctcc aggttatccc
 1260
 agaaatgacc caactctctc acttttcct ctccccttg aataaagtcg ccagctaaaa
 1320
 aaaaagtcca tgtccacctg agataagagc tgttggtgg attgggggt ccacatgcga
 1380
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 1426

<210> 3754

<211> 261

<212> PRT

<213> Homo sapiens

<400> 3754

Met	Asp	Glu	Ala	Leu	Glu	Thr	Gln	Leu	Lys	Thr	Ser	Arg	Gly	Arg	Phe
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Ser	Ala	Thr	Glu	Ser	Leu	Pro	Thr	Leu	Glu	Leu	Leu	Ser	Gln	Val	Asp
			20						25				30		
Met	Asp	Cys	Arg	Val	His	Met	Arg	Pro	Ile	Gly	Leu	Thr	Trp	Val	Leu
		35					40					45			
Gln	Leu	Thr	Leu	Ala	Trp	Ile	Leu	Leu	Glu	Ala	Cys	Gly	Gly	Ser	Arg
		50				55					60				
Pro	Leu	Gln	Ala	Arg	Ser	Gln	Gln	His	His	Gly	Leu	Ala	Ala	Asp	Leu
65					70					75				80	
Gly	Lys	Gly	Lys	Leu	His	Leu	Ala	Gly	Pro	Cys	Cys	Pro	Ser	Glu	Met

	85		90		95
Asp Thr Thr Glu Thr Ser Gly Pro Gly Asn His Pro Glu Arg Cys Gly					
100		105		110	
Val Pro Ser Pro Glu Cys Glu Ser Phe Leu Glu His Leu Gln Arg Ala					
115		120		125	
Leu Arg Ser Arg Phe Arg Leu Arg Leu Leu Gly Val Arg Gln Ala Gln					
130		135		140	
Pro Leu Cys Glu Glu Leu Cys Gln Ala Trp Phe Ala Asn Cys Glu Asp					
145		150		155	160
Asp Ile Thr Cys Gly Pro Thr Trp Leu Pro Leu Ser Glu Lys Arg Gly					
165		170		175	
Cys Glu Pro Ser Cys Leu Thr Tyr Gly Gln Thr Phe Ala Asp Gly Thr					
180		185		190	
Asp Leu Cys Arg Ser Ala Leu Gly His Ala Leu Pro Val Ala Ala Pro					
195		200		205	
Gly Ala Arg His Cys Phe Asn Ile Ser Ile Ser Ala Val Pro Arg Pro					
210		215		220	
Arg Pro Gly Arg Arg Gly Arg Glu Ala Pro Ser Arg Arg Ser Arg Ser					
225		230		235	240
Pro Arg Thr Ser Ile Leu Asp Ala Ala Gly Ser Gly Ser Gly Ser Gly					
245		250		255	
Ser Gly Ser Gly Pro					
260					

<210> 3755

<211> 3149

<212> DNA

<213> Homo sapiens

<400> 3755

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60gtcccaagta caagtaacag ccaatcagat ttgttttccg aagagaccac cagtgacaac
120aacaatacct cgataaccac gccaaactctt agtcccagcc agcagccgct tccgacagaa
180ctgaatgtaa cttcacccgag taaagaggag tgtggggccat gcacagacac agtcatgtc
240tcattaatca caccaacaaa aagatcctgt ggtacagatt cacagtctga gaatgaggct
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360tctaaacaga agagtcgacg tcgggtgcttc cagtgccaaa ccaaactgga gctgggtgcg
420caggaattgg gatcgtgtcg ctgcggttat gtgttctgta tgttacatcg cctccccgag
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660gacaaagtca gccagacacc ttgtactggg cagcgtcag actgcagcca gtccgtttcc
720

tttcttttagc cagccatcct ggtactgtag tttaggggtt gatgggtggt gaaattgatt
780
tctggctggt tactaagggt cctgctagcc attgtataaa attaaaacat gaagaatatt
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ttttttttga gcatggctag tggatttaaa acaacacata cctgtcactg ctggagtcaa
900
acttataaaa agccttaagt ggaaagtgtt ccagacggag actctgagtt aatagaggag
960
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1020
atcggccttt cacctcttca cttatcctta gtcccagtag ccaggatacc tgatggccac
1080
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1200
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1320
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1380
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1440
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1500
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1560
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1620
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1680
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1800
gcctgagggt acatttctcc acctgtgcc cctcatgttc acagaggatt tcagcagctg
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1920
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1980
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2040
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2100
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2160
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2220
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2280
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2340

cccagcggtt accactgctg tcaagccaca gcccttgccc accatacggg ccatacctcag
 2400
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 2460
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 2520
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 2580
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 2640
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 2760
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 2880
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 3000
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 3060
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 3120
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 3149

<210> 3756

<211> 199

<212> PRT

<213> Homo sapiens

<400> 3756

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Asp	Asp	Asp	Ser	Ala	Pro	Ser	Thr	Ser	Asn	Ser	Gln	Ser	Asp	Leu	Phe
			20					25					30		
Ser	Glu	Glu	Thr	Thr	Ser	Asp	Asn	Asn	Asn	Thr	Ser	Ile	Thr	Thr	Pro
			35				40					45			
Thr	Leu	Ser	Pro	Ser	Gln	Gln	Pro	Leu	Pro	Thr	Glu	Leu	Asn	Val	Thr
			50			55					60				
Ser	Pro	Ser	Lys	Glu	Glu	Cys	Gly	Pro	Cys	Thr	Asp	Thr	Ala	His	Val
65					70				75					80	
Ser	Leu	Ile	Thr	Pro	Thr	Lys	Arg	Ser	Cys	Gly	Thr	Asp	Ser	Gln	Ser
			85					90						95	
Glu	Asn	Glu	Ala	Ser	Pro	Val	Lys	Arg	Pro	Arg	Leu	Leu	Glu	Asn	Thr
			100					105					110		
Glu	Arg	Ser	Glu	Glu	Thr	Ser	Arg	Ser	Lys	Gln	Lys	Ser	Arg	Arg	Arg
			115				120					125			
Cys	Phe	Gln	Cys	Gln	Thr	Lys	Leu	Glu	Leu	Val	Gln	Gln	Glu	Leu	Gly
			130			135					140				
Ser	Cys	Arg	Cys	Gly	Tyr	Val	Phe	Cys	Met	Leu	His	Arg	Leu	Pro	Glu

145		150		155		160
Gln	His	Asp	Cys	Thr	Phe	Asp
				His	Met	Gly
				Arg	Gly	Arg
				Glu	Glu	Ala
		165		170		175
Ile	Met	Lys	Met	Val	Lys	Leu
				Asp	Arg	Lys
				Val	Gly	Arg
				Ser	Cys	Gln
		180		185		190
Arg	Ile	Gly	Glu	Gly	Cys	Ser
		195				

<210> 3757
 <211> 1046
 <212> DNA
 <213> Homo sapiens

<400> 3757
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 120
 ccgggcctca ggttcgacaa catccaggga gatgcagtta aagacttgat gtttcgcttt
 180
 ctgggtgaaa aagctgcagc aaagagacaa gtcctaaatg ccgactcagt ggaacaatct
 240
 tttgttgat tgaacagct aatccgttga caaatggcat gcccctccgt gccgtcagca
 300
 cactgacctt gtcaccatta ctaacggctg gctggcgctg cttccagcaa gagctgcaga
 360
 aactggaggg cagcagtga cctgtgcgga cgtctcctca cagcccacgg ccagggtac
 420
 ggcaagagcg ggctgctcac cagccacacg acagattcac tgcagctctg gtttgcagg
 480
 ctggcactac tagtgaagt gggccttttc cagaatgctg agatggaatt tgaacccttc
 540
 ggaaatcttg atcagccaga tctttattcc gagtactacc cgcacgtgta ccttgggcgc
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 660
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 720
 ggtggcgctg tcattcttcc ctgccacggg gagaacatgc cctccacgcc ctccccacag
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 <211> 199
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<213> Homo sapiens

<400> 3758

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 Trp Phe Val Arg Leu Ala Leu Leu Val Lys Leu Gly Leu Phe Gln Asn
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 Ala Glu Met Glu Phe Glu Pro Phe Gly Asn Leu Asp Gln Pro Asp Leu
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 Tyr Ser Glu Tyr Tyr Pro His Val Tyr Pro Gly Arg Arg Gly Ser Met
 85 90 95
 Val Pro Phe Ser Met Arg Ile Leu His Ala Glu Leu Gln Gln Tyr Leu
 100 105 110
 Gly Asn Pro Gln Glu Ser Leu Asp Arg Leu His Lys Val Lys Thr Val
 115 120 125
 Cys Ser Lys Val Gly Gly Ala Val Ile Leu Pro Cys His Gly Glu Asn
 130 135 140
 Met Pro Ser Thr Pro Ser Pro Gln Asp Met Pro Val Leu Phe Pro Ala
 145 150 155 160
 Arg Pro Ala Pro Cys Thr Ile Ala Ala Ser Ala Phe Arg Arg Leu Gly
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<211> 830

<212> DNA

<213> Homo sapiens

<400> 3759

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<213> Homo sapiens

<400> 3760

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			20					25					30		
Cys	Asp	Arg	Glu	Leu	Tyr	Pro	Gly	Glu	Pro	Arg	Leu	His	Leu	Ser	Ala
		35					40				45				
Pro	Gly	Pro	Ala	Ser	His	Gln	Asp	Gln	Pro	Glu	Trp	Gln	Glu	Asp	Met
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Gly	Arg	Thr	Gly	Gly	Gly	Gly	Cys	Gly	His	Pro	Ser	Phe	Asn	Gln	Met
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Leu	Asp	Val	Lys	Gly	Pro	Ile	Pro	Val	Lys	Arg	Gly	Gly	Gln	Ala	Leu
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Phe	Val	Leu	Leu												
			100												

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<211> 458

<212> DNA

<213> Homo sapiens

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<210> 3763
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 <212> DNA
 <213> Homo sapiens

<400> 3763
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<211> 288

<212> PRT

<213> Homo sapiens

<400> 3764

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Lys	Thr	Leu	Lys	Phe	Phe	Gln	Thr	Phe	Ala	Leu	Leu	Glu	Ile	Val	His
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			165					170						175	
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<210> 3765

<211> 2764

<212> DNA

<213> Homo sapiens

<400> 3765

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<210> 3766

<211> 464

<212> PRT

<213> Homo sapiens

<400> 3766

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 Cys Leu Lys Cys Lys Glu Lys Cys Glu Gly Phe Glu Leu His Phe Trp
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 His Pro Ala Cys Phe Val Cys Ser Thr Cys His Glu Leu Leu Val Asp
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<211> 2439

<212> DNA

<213> Homo sapiens

<400> 3767

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<210> 3768

<211> 379

<212> PRT

<213> Homo sapiens

<400> 3768

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 Asn Leu Asp Gln Pro Asp Leu Tyr Tyr Glu Tyr Tyr Pro His Val Tyr
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 Pro Gly Arg Arg Gly Ser Met Val Pro Phe Ser Met Arg Ile Leu His
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 Tyr Ser Met Ala Asn Cys Leu Leu Leu Met Lys Asp Tyr Val Leu Ala
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 Val Glu Ala Tyr His Ser Val Ile Lys Tyr Tyr Pro Glu Gln Glu Pro
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 Gln Leu Leu Ser Gly Ile Gly Arg Ile Ser Leu Gln Ile Gly Asp Ile
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 Lys Thr Ala Glu Lys Tyr Phe Gln Asp Val Glu Lys Val Thr Gln Lys
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 Leu Asp Gly Leu Gln Gly Lys Ile Met Val Leu Met Asn Ser Ala Phe
 260 265 270
 Leu His Leu Gly Gln Asn Asn Phe Ala Glu Ala His Arg Phe Phe Thr
 275 280 285
 Glu Ile Leu Arg Met Asp Pro Arg Asn Ala Val Ala Asn Asn Asn Ala
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 Ala Val Cys Leu Leu Tyr Leu Gly Lys Leu Lys Asp Ser Leu Arg Gln
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 Leu Glu Ala Met Val Gln Gln Asp Pro Arg His Tyr Leu His Glu Ser
 325 330 335
 Val Leu Phe Asn Leu Thr Thr Met Tyr Glu Leu Glu Ser Ser Arg Ser
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<210> 3769

<211> 1931

<212> DNA

<213> Homo sapiens

<400> 3769

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<210> 3770

<211> 447

<212> PRT

<213> Homo sapiens

<400> 3770

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Cys	Ser	Gly	His	Asn	His	Val	Pro	Asn	Ser	Leu	Ser	Tyr	Ala	Arg	Asp
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Gly	Gly	Asp	Trp	Ala	Pro	Phe	Pro	His	Asp	Ile	Leu	Pro	Tyr	Gln	Asp
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Ser	Gly	Asp	Ser	Gly	Ser	Asp	Tyr	Leu	Phe	Pro	Glu	Ala	Ser	Glu	Glu
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Ser	Ala	Gly	Ile	Pro	Gly	Lys	Ser	Glu	Leu	Pro	Tyr	Glu	Glu	Leu	Trp
	130				135						140				
Leu	Glu	Glu	Gly	Lys	Pro	Ser	His	Gln	Pro	Leu	Thr	Arg	Ser	Leu	Ser
145				150						155				160	
Glu	Lys	Asn	Arg	Cys	Asp	Gln	Phe	Arg	Gly	Ser	Val	Arg	Ser	Lys	Cys
			165					170						175	
Ala	Thr	Ser	Pro	Leu	Pro	Ile	Pro	Gly	Thr	Leu	Gly	Ala	Ala	Val	Lys
			180					185						190	
Ser	Ser	Asp	Thr	Ala	Leu	Pro	Pro	Pro	Pro	Val	Pro	Pro	Lys	Ser	Glu
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Ala	Val	Arg	Glu	Glu	Cys	Arg	Leu	Leu	Asn	Ala	Pro	Pro	Val	Pro	Pro
	210				215						220				
Arg	Ser	Ala	Lys	Pro	Leu	Ser	Thr	Ser	Pro	Ser	Ile	Pro	Pro	Arg	Thr
225				230						235				240	
Val	Lys	Pro	Ala	Arg	Gln	Gln	Thr	Arg	Ser	Pro	Ser	Pro	Thr	Leu	Ser
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Tyr	Tyr	Ser	Ser	Gly	Leu	His	Asn	Ile	Val	Thr	Lys	Thr	Asp	Thr	Asn
		260					265						270		
Pro	Ser	Glu	Ser	Thr	Pro	Val	Ser	Cys	Tyr	Pro	Cys	Asn	Arg	Val	Lys
	275					280						285			
Thr	Asp	Ser	Val	Asp	Leu	Lys	Ser	Pro	Phe	Gly	Ser	Pro	Ser	Ala	Glu

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 Ala Val Ser Ser Arg Leu Ser Trp Pro Asn His Tyr Ser Gly Ala Ser
 305 310 315 320
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 325 330 335
 Ser Tyr Pro Arg Gln Lys Thr Pro Gly Thr Pro Lys Arg Asn Cys Pro
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 Ala Pro Phe Asp Phe Asp Gly Cys Glu Leu Leu Ala Ser Pro Thr Ser
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 Pro Val Thr Ala Glu Phe Ser Ser Ser Val Ser Gly Cys Pro Lys Ser
 370 375 380
 Ala Ser Tyr Ser Leu Glu Ser Thr Asp Val Lys Ser Leu Ala Ala Gly
 385 390 395 400
 Val Thr Lys Gln Ser Thr Ser Cys Pro Ala Leu Pro Pro Arg Ala Pro
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<210> 3771

<211> 1514

<212> DNA

<213> Homo sapiens

<400> 3771

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<210> 3772

<211> 280

<212> PRT

<213> Homo sapiens

<400> 3772

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			20					25					30		
Thr	Leu	Gln	His	Trp	Pro	His	Ile	Ile	Arg	Ile	Gly	Asp	Leu	Lys	Pro
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Thr	Ser	Glu	Ile	Pro	Lys	Gln	Val	Lys	Val	Lys	Lys	Leu	Lys	Asn	Leu
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Leu	Asn	Arg	Asp	Glu	Glu	Ile	Ile	Lys	Gln	Leu	Gln	Lys	Gly	Val	Gln
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Gln	Lys	Arg	Pro	Ser	Glu	Ala	Gln	Ser	Val	Ile	Leu	Arg	Arg	Tyr	Phe
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			165					170					175		
Tyr	Arg	His	Phe	Leu	Lys	Ser	Pro	Asn	Phe	Asp	Gly	Trp	Phe	Lys	Thr

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195	200	205
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210	215	220
Glu Thr Val Asp Leu Val Leu Lys Leu Lys Asn Lys Leu Leu Gln Ala		
225	230	235
Asp Arg Glu His Leu Pro Val Lys Pro Asp Thr Met Glu Lys Leu Arg		
245	250	255
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<210> 3773

<211> 2664

<212> DNA

<213> Homo sapiens

<400> 3773

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<210> 3774

<211> 678

<212> PRT

<213> Homo sapiens

<400> 3774

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Val	Arg	Pro	Ala	Gly	Pro	Pro	Asn	Ala	Gly	Ser	Met	Ser	Ala	Gly	Ser
			35				40					45			
Glu	Arg	Gly	Ala	Ala	Ala	Thr	Pro	Gly	Gly	Leu	Pro	Ala	Pro	Cys	Ala
			50			55					60				
Ser	Lys	Val	Glu	Leu	Arg	Leu	Ser	Cys	Arg	His	Leu	Leu	Asp	Arg	Asp
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Pro	Leu	Thr	Lys	Ser	Asp	Pro	Ser	Val	Ala	Leu	Leu	Gln	Gln	Ala	Gln
				85					90					95	
Gly	Gln	Trp	Val	Gln	Val	Gly	Arg	Thr	Glu	Val	Val	Arg	Ser	Ser	Leu
			100					105					110		
His	Pro	Val	Phe	Ser	Lys	Val	Phe	Thr	Val	Asp	Tyr	Tyr	Phe	Glu	Glu
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Val	Gln	Arg	Leu	Arg	Phe	Glu	Val	Tyr	Asp	Thr	His	Gly	Pro	Ser	Gly
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Phe	Ser	Cys	Gln	Glu	Asp	Asp	Phe	Leu	Gly	Gly	Met	Glu	Cys	Thr	Leu
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			180					185					190		
Cys	Thr	Glu	Ser	Ser	His	Leu	Ala	Arg	Thr	Gly	Pro	Ser	Phe	Leu	Leu
			195				200					205			
Arg	Tyr	Asp	Asp	Leu	Cys	Leu	Pro	Trp	Ala	Thr	Ala	Gly	Ala	Val	Arg
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Trp	Trp	Thr	Cys	Arg	Gly	Gly	His	Thr	Gln	Gly	Trp	Gln	Ile	Val	Ala
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Gln	Lys	Lys	Val	Thr	Arg	Pro	Leu	Leu	Leu	Lys	Phe	Gly	Arg	Asn	Ala
				245						250				255	
Gly	Lys	Ser	Thr	Ile	Thr	Val	Ile	Ala	Glu	Asp	Ile	Ser	Gly	Asn	Asn
			260					265					270		
Gly	Tyr	Val	Glu	Leu	Ser	Phe	Arg	Ala	Arg	Lys	Leu	Asp	Asp	Lys	Asp
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Ser	Cys	Asp	Val	His	Arg	Pro	Leu	Lys	Phe	Leu	Val	Trp	Asp	Tyr	Asp
			340					345					350		
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  385      390      395      400
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      405      410      415
Leu Asp Tyr Ile Met Gly Gly Cys Gln Ile Ser Phe Thr Val Ala Ile
      420      425      430
Asp Phe Thr Ala Ser Asn Gly Asp Pro Arg Ser Ser Gln Ser Leu His
      435      440      445
Tyr Ile Ser Pro Arg Gln Pro Asn His Tyr Leu Gln Ala Leu Arg Ala
      450      455      460
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Phe Gly Phe Gly Ala Arg Ile Pro Pro Asn Phe Glu Val Ser His Asp
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Ile Val Arg Ala Ser Arg Leu Pro Met Ser Ile Ile Ile Val Gly Val
      580      585      590
Gly Asn Ala Asp Phe Ser Asp Met Arg Leu Leu Asp Gly Asp Asp Gly
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<212> PRT

<213> Homo sapiens

<400> 3778

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 Arg Lys Ala Ser Ile Ser Tyr Phe Lys Asn Gln Arg Gly Ile Gln Tyr
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 Asn Thr Val Gln Glu Lys Thr Phe Asn Lys Asp Thr Val Ile Ile Val
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 Asp Leu Lys Asp Ala Lys Leu Gln Thr Leu Lys Glu Leu Phe Pro Gln
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 Arg Ser Asp Asn Asp Leu Leu Lys Ile Glu Ser Thr Ser Thr Met
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 260 265 270
 Gln Glu Ser Ile Val Leu Lys Leu Gln Lys Glu Phe Pro Asn Phe Asp
 275 280 285
 Lys Gln Glu Leu Arg Glu Val Leu Lys Glu His Glu Trp Met Tyr Thr
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Thr Ile Asp Asn Trp Leu Arg Glu Val Asn Leu Trp Cys Pro Thr Leu				
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Lys Val Leu Cys Tyr Tyr Gly Ser Gln Glu Glu Arg Lys Gln Ile Arg				
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Phe Asn Ile His Ser Arg Tyr Glu Asp Tyr Asn Val Ile Val Thr Thr				
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Tyr Asn Cys Ala Ile Ser Ser Ser Asp Asp Arg Ser Leu Phe Arg Arg				
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Leu Lys Leu Asn Tyr Ala Ile Phe Asp Glu Gly His Met Leu Lys Asn				
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Arg Leu Leu Leu Thr Gly Thr Pro Val Gln Asn Asn Leu Leu Glu Leu				
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Gln Ser Ile Tyr Glu Lys Glu Arg Ile Ala His Ala Lys Gln Ile Ile				
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Lys Pro Phe Ile Leu Arg Arg Val Lys Glu Glu Val Leu Lys Gln Leu				
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Pro Pro Lys Lys Asp Arg Ile Glu Leu Cys Ala Met Ser Glu Arg Gln				
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Glu Gln Leu Tyr Leu Gly Leu Phe Asn Arg Leu Lys Lys Ser Ile Asn				
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<211> 530

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<213> Homo sapiens

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Val Val Arg Ser Lys Leu Ser Pro Ser Pro Ser Leu Arg Lys Ser Ser			
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 <211> 112
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<400> 3782
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 Val Pro Trp Thr Pro Arg Phe Ala Tyr Gly Val Phe Tyr Ala Asp Pro
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 Cys Thr Gly Gly Asp Ser Tyr His Pro His Glu Gln Ser Ser Pro Pro
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<211> 804

<212> PRT

<213> Homo sapiens

<400> 3784

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Leu	Leu	Glu	Arg	Val	Glu	Glu	Pro	Val	Leu	Gln	Asn	Gln	Ile	Arg	Glu
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His	Val	Ile	Ala	Ile	Glu	Asp	Ala	Phe	Val	Asn	Ser	Gln	Glu	Trp	Thr
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Val	Gln	Glu	Glu	Ser	Pro	Glu	Gly	Gly	Arg	Phe	Lys	Lys	Glu	Ile	Val
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2931

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His Leu Ala Cys Arg Lys Gly Asn Val Val Leu Ala Gln Leu Leu Ile		
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Trp Tyr Gly Val Asp Val Thr Ala Arg Asp Ala His Gly Asn Thr Ala		
740	745	750
Leu Ala Tyr Ala Arg Gln Ala Ser Ser Gln Glu Cys Ile Asp Val Leu		
755	760	765
Leu Gln Tyr Gly Cys Pro Asp Glu Arg Phe Val Leu Met Ala Thr Pro		
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<210> 3785

<211> 1901

<212> DNA

<213> Homo sapiens

<400> 3785

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<211> 168

<212> PRT

<213> Homo sapiens

<400> 3786

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Gln	Ala	Gln	Ala	Glu	Pro	Glu	Arg	His	Val	Trp	His	Arg	Arg	Glu	Ser
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65					70					75				80	
Ala	Pro	Gln	Ser	Ile	Pro	Arg	Ser	Ala	Ser	Tyr	Pro	Cys	Ala	Ala	Pro
				85					90					95	
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Arg	Tyr Gly Gly Ile Thr Asp	Pro Gly Thr Val	Pro Arg Val	Pro Ser	
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His	Phe Ser Arg Leu Pro Leu Gly Gly Trp Ala	Glu Asp Gly Gln Ser			
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<210> 3787

<211> 717

<212> DNA

<213> Homo sapiens

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<210> 3788

<211> 113

<212> PRT

<213> Homo sapiens

<400> 3788

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Pro	Trp Gly Ala Lys Cys Ser Trp Arg Gln Val Ala Lys Gly Glu His
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<210> 3790
 <211> 1092
 <212> PRT
 <213> Homo sapiens

<400> 3790

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 35          40          45
Glu Asp Leu His Asn Glu Lys Glu Leu Ile Lys Glu Leu Glu Gln Ser
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 65          70          75          80
Asp Leu Thr Arg His Val Leu Val Glu Asp Val Met Val Leu Lys Glu
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Gln Ile Glu His Leu His Arg Gln Trp Glu Asp Leu Cys Leu Arg Val
100          105          110
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115          120          125
Phe Asn Glu Lys Asn Lys Glu Leu Cys Ala Trp Leu Val Gln Met Glu
130          135          140
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Lys Leu Gln Lys Asp Cys Met Glu Glu Ile Asn Leu Phe Ser Glu Asn
165          170          175
Lys Leu Gln Leu Lys Gln Met Gly Asp Gln Leu Ile Lys Ala Ser Asn
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Lys Ser Arg Ala Ala Glu Ile Asp Asp Lys Leu Asn Lys Ile Asn Asp
195          200          205
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275          280          285
Ser Val Phe Asn Ile Cys Asp Val Leu Leu His Asp Ser Asp Ala Cys
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325          330          335
Lys Ile Glu Glu Thr Trp Arg Leu Trp Gln Lys Phe Leu Asp Asp Tyr
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Ser Arg Phe Glu Asp Trp Leu Lys Ser Ala Glu Arg Thr Ala Ala Cys
355          360          365
Pro Asn Ser Ser Glu Val Leu Tyr Thr Ser Ala Lys Glu Glu Leu Lys

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Arg Phe Glu Ala Phe	Gln Arg Gln Ile His	Glu Arg Leu Thr Gln Leu
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Glu Leu Ile Asn Lys	Gln Tyr Arg Arg Leu Ala	Arg Glu Asn Arg Thr
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Asp Thr Ala Ser Arg	Leu Lys Gln Met Val His	Glu Gly Asn Gln Arg
420	425	430
Trp Asp Asn Leu Gln	Arg Arg Val Thr Ala Val	Leu Arg Arg Leu Arg
435	440	445
His Phe Thr Asn Gln	Arg Glu Glu Phe Glu Gly	Thr Arg Glu Ser Ile
450	455	460
Leu Val Trp Leu Thr	Glu Met Asp Leu Gln Leu	Thr Asn Val Glu His
465	470	475
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485	490	495
Gln Gln Glu Ile Thr	Leu Asn Thr Asn Lys Ile	Asp Gln Leu Ile Val
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Phe Gly Glu Gln Leu	Ile Gln Lys Ser Glu Pro	Leu Asp Ala Val Leu
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Ile Glu Asp Glu Leu	Glu Glu His Arg Tyr Cys	Gln Glu Val Phe
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Gly Arg Val Ser Arg	Phe His Arg Arg Leu Thr	Ser Cys Thr Pro Gly
545	550	555
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565	570	575
Pro Arg Glu Ile Gln	Thr Asp Ser Trp Arg Lys	Arg Gly Glu Ser Glu
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Glu Pro Ser Ser Pro	Gln Ser Leu Cys His Leu	Val Ala Pro Gly His
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Glu Arg Ser Gly Cys	Glu Thr Pro Val Ser Val	Asp Ser Ile Pro Leu
610	615	620
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625	630	635
Asp Glu Glu Gly Pro	Tyr Tyr Ser Ala Leu Ser	Gly Lys Ser Ile Ser
645	650	655
Asp Gly His Ser Trp	His Val Pro Asp Ser Pro	Ser Cys Pro Glu His
660	665	670
His Tyr Lys Gln Met	Glu Gly Asp Arg Asn Val	Pro Pro Val Pro Pro
675	680	685
Ala Ser Ser Thr Pro	Tyr Lys Pro Pro Tyr Gly	Lys Leu Leu Leu Pro
690	695	700
Pro Gly Thr Asp Gly	Gly Lys Glu Gly Pro Arg	Val Leu Asn Gly Asn
705	710	715
Pro Gln Gln Glu Asp	Gly Gly Leu Ala Gly Ile	Thr Glu Gln Gln Ser
725	730	735
Gly Ala Phe Asp Arg	Trp Glu Met Ile Gln Ala	Gln Glu Leu His Asn
740	745	750
Lys Leu Lys Ile Lys	Gln Asn Leu Gln Gln Leu	Asn Ser Asp Ile Ser
755	760	765
Ala Ile Thr Thr Trp	Leu Lys Lys Thr Glu Ala	Glu Leu Glu Met Leu
770	775	780
Lys Met Ala Lys Pro	Pro Ser Asp Ile Gln Glu	Ile Glu Leu Arg Val
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<210> 3791
<211> 1011
<212> DNA
<213> Homo sapiens
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180
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300
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 420
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<210> 3792

<211> 288

<212> PRT

<213> Homo sapiens

<400> 3792

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			20					25					30		
Ala	Leu	Ser	Met	Gly	Gly	Lys	Val	Pro	Val	Ser	Glu	Gly	Leu	Glu	His
		35				40						45			
Ser	Asp	Leu	Pro	Asp	Gly	Thr	Gly	Glu	Phe	Leu	Asp	Ala	Trp	Leu	Met
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Leu	Val	Glu	Lys	Met	Val	Asn	Pro	Thr	Thr	Val	Leu	Glu	Ser	Pro	His
65					70					75				80	
Ser	Leu	Pro	Ala	Lys	Leu	Pro	Gly	Gly	Val	Gln	Asn	Phe	Pro	Gln	Phe
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Ser	Ala	Leu	Arg	Phe	Leu	Val	Val	Thr	Gln	Lys	Ala	Ala	Phe	Thr	Cys
			100					105					110		
Ile	Lys	Asn	Leu	Trp	Asn	Arg	Lys	Pro	Leu	Lys	Val	Tyr	Gly	Gly	Arg
		115				120					125				
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Pro	Val	Ile	Arg	Glu	Arg	Leu	Ser	Lys	Glu	Lys	Glu	Gly	Ser	Arg	Gly
145				150						155				160	
Glu	Glu	Asp	Thr	Gly	Gln	Glu	Glu	Gly	Gly	Ser	Arg	Arg	Glu	Pro	Gln
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Val	Asn	Gln	Gln	Gln	Leu	Gln	Gln	Leu	Met	Asp	Met	Gly	Phe	Thr	Arg

<210> 3795
<211> 1341

<212> DNA

<213> Homo sapiens

<400> 3795

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<210> 3796

<211> 294

<212> PRT

<213> Homo sapiens

<400> 3796

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Pro Asn Gln Leu Tyr Tyr Glu Gly Glu Leu Gln Ala Cys Ala Asp Val
      35           40           45
Val Asp Arg Glu Arg Phe Cys Arg Trp Ala Gly Leu Pro Arg Gln Gly
      50           55           60
Phe Pro Ile Ile Phe His Gly Val Met Gly Lys Asp Glu Arg Glu Gly
      65           70           75           80
Asn Ser Pro Ser Phe Phe Asn Pro Glu Glu Ala Ala Thr Val Thr Ser
      85           90           95
Tyr Leu Lys Leu Leu Leu Ala Pro Ser Ser Lys Lys Gly Lys Ala Arg
      100           105           110
Leu Ser Pro Arg Ser Val Gly Val Ile Ser Pro Tyr Arg Lys Gln Val
      115           120           125
Glu Lys Ile Arg Tyr Cys Ile Thr Lys Leu Asp Arg Glu Leu Arg Gly
      130           135           140
Leu Asp Asp Ile Lys Asp Leu Lys Val Gly Ser Val Glu Glu Phe Gln
      145           150           155           160
Gly Gln Glu Arg Ser Val Ile Leu Ile Ser Thr Val Arg Ser Ser Gln
      165           170           175
Ser Phe Val Gln Leu Asp Leu Asp Phe Asn Leu Gly Phe Leu Lys Asn
      180           185           190
Pro Lys Arg Phe Asn Val Ala Val Thr Arg Ala Lys Ala Leu Leu Ile
      195           200           205
Ile Val Gly Asn Pro Leu Leu Leu Gly His Asp Pro Asp Trp Lys Val
      210           215           220
Phe Leu Glu Phe Cys Lys Glu Asn Gly Gly Tyr Thr Gly Cys Pro Phe
      225           230           235           240
Pro Ala Lys Leu Asp Leu Gln Gln Gly Gln Asn Leu Leu Gln Gly Leu
      245           250           255
Ser Lys Leu Ser Pro Ser Thr Ser Gly Pro His Ser His Asp Tyr Leu
      260           265           270
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<210> 3797

<211> 1970

<212> DNA

<213> Homo sapiens

<400> 3797

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<210> 3798

<211> 473

<212> PRT

<213> Homo sapiens

<400> 3798

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			20					25					30		
His	Trp	Trp	Ser	Glu	Arg	Thr	His	Lys	Asn	Leu	Ser	Asp	Met	Glu	Asn
			35				40					45			
Glu	Phe	Tyr	Tyr	Arg	Tyr	Pro	Ser	Phe	Gln	Asp	Val	His	Val	Met	Val
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Phe	Val	Gly	Phe	Gly	Phe	Leu	Met	Thr	Phe	Leu	Gln	Arg	Tyr	Gly	Phe
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Ser	Ala	Val	Gly	Phe	Asn	Phe	Leu	Leu	Ala	Ala	Phe	Gly	Ile	Gln	Trp
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Ala	Leu	Leu	Met	Gln	Gly	Trp	Phe	His	Phe	Leu	Gln	Asp	Arg	Tyr	Ile
			100					105					110		
Val	Val	Gly	Val	Glu	Asn	Leu	Ile	Asn	Ala	Asp	Phe	Cys	Val	Ala	Ser
			115				120					125			
Val	Cys	Val	Ala	Phe	Gly	Ala	Val	Leu	Gly	Lys	Val	Ser	Pro	Ile	Gln
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Thr	Ile	His	Thr	Phe	Gly	Ala	Tyr	Phe	Gly	Leu	Thr	Val	Thr	Arg	Ile
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Leu	Tyr	Arg	Arg	Asn	Leu	Glu	Gln	Ser	Lys	Glu	Arg	Gln	Asn	Ser	Val
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Tyr	Gln	Ser	Asp	Leu	Phe	Ala	Met	Ile	Gly	Thr	Leu	Phe	Leu	Trp	Met
			210			215						220			
Tyr	Trp	Pro	Ser	Phe	Asn	Ser	Ala	Ile	Ser	Tyr	His	Gly	Asp	Ser	Gln
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His	Arg	Ala	Ala	Ile	Asn	Thr	Tyr	Cys	Ser	Leu	Ala	Ala	Cys	Val	Leu
				245					250					255	
Thr	Ser	Val	Ala	Ile	Ser	Ser	Ala	Leu	His	Lys	Lys	Gly	Lys	Leu	Asp
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Met	Val	His	Ile	Gln	Asn	Ala	Thr	Leu	Ala	Gly	Gly	Val	Ala	Val	Gly
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Thr	Ala	Ala	Glu	Met	Met	Leu	Met	Pro	Tyr	Gly	Ala	Leu	Ile	Ile	Gly
			290			295					300				
Phe	Val	Cys	Gly	Ile	Ile	Ser	Thr	Leu	Gly	Phe	Val	Tyr	Leu	Thr	Pro
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          325          330          335
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          355          360          365
Ser Phe Asp Phe Gln Gly Phe Asn Gly Asp Trp Thr Ala Arg Thr Gln
          370          375          380
Gly Lys Phe Gln Ile Tyr Gly Leu Leu Val Thr Leu Ala Met Ala Leu
          385          390          395          400
Met Gly Gly Ile Ile Val Gly Leu Ile Leu Arg Leu Pro Phe Trp Gly
          405          410          415
Gln Pro Ser Asp Glu Asn Cys Phe Glu Asp Ala Val Tyr Trp Glu Met
          420          425          430
Pro Glu Gly Asn Ser Thr Val Tyr Ile Pro Glu Asp Pro Thr Phe Lys
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Pro Ser Gly Pro Ser Val Pro Ser Val Pro Met Val Ser Pro Leu Pro
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 <212> DNA
 <213> Homo sapiens

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<210> 3800
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<212> DNA

<213> Homo sapiens

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<210> 3802

<211> 476

<212> PRT

<213> Homo sapiens

<400> 3802

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			20					25					30		
Leu	Trp	Thr	Ala	Ile	Thr	Leu	Phe	Ile	Phe	Leu	Val	Cys	Cys	Gln	Ile
			35					40					45		
Pro	Leu	Phe	Gly	Ile	Met	Ser	Ser	Asp	Ser	Ala	Asp	Pro	Phe	Tyr	Trp
			50					55				60			
Met	Arg	Val	Ile	Leu	Ala	Ser	Asn	Arg	Gly	Thr	Leu	Met	Glu	Leu	Gly
			65					70				75			80
Ile	Ser	Pro	Ile	Val	Thr	Ser	Gly	Leu	Ile	Met	Gln	Leu	Leu	Ala	Gly
			85					90						95	
Ala	Lys	Ile	Ile	Glu	Val	Gly	Asp	Thr	Pro	Lys	Asp	Arg	Ala	Leu	Phe
			100					105						110	
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<210> 3803
<211> 345
<212> DNA
<213> Homo sapiens
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<400> 3803
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 180
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 240
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<210> 3804

<211> 115

<212> PRT

<213> Homo sapiens

<400> 3804

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			20					25					30		
Glu	Leu	Arg	Lys	Ser	Gly	Glu	Ala	Lys	Tyr	Ala	His	Leu	Ser	Asp	Glu
			35				40					45			
Leu	His	Val	Leu	Ile	Glu	Val	Phe	Ala	Pro	Pro	Gly	Glu	Ala	Tyr	Ser
			50			55					60				
Arg	Met	Ser	His	Ala	Leu	Glu	Glu	Ile	Lys	Lys	Phe	Leu	Val	Pro	Asp
65					70				75					80	
Tyr	Asn	Asp	Glu	Ile	Arg	Gln	Glu	Gln	Leu	Arg	Glu	Leu	Ser	Tyr	Leu
			85						90					95	
Asn	Gly	Ser	Glu	Asp	Ser	Gly	Arg	Gly	Arg	Gly	Ile	Arg	Gly	Arg	Gly
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Ile	Arg	Ile													
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<210> 3805

<211> 1923

<212> DNA

<213> Homo sapiens

<400> 3805

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1923

<210> 3806

<211> 280
 <212> PRT
 <213> Homo sapiens

<400> 3806

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Pro Leu Arg Phe Trp Leu Val Ile Asn Gln Glu Gly Asn Met Val Thr
 35           40           45
Ala Arg Gln Glu Pro Arg Leu Val Leu Ile Ser Leu Thr Cys Asp Gly
 50           55           60
Asp Thr Leu Thr Leu Ser Ala Ala Tyr Thr Lys Asp Leu Leu Leu Pro
 65           70           75           80
Ile Lys Thr Pro Thr Thr Asn Ala Val His Lys Cys Arg Val His Gly
 85           90           95
Leu Glu Ile Glu Gly Arg Asp Cys Gly Glu Ala Ala Ala Gln Trp Ile
 100          105          110
Thr Ser Phe Leu Lys Ser Gln Pro Tyr Arg Leu Val His Phe Glu Pro
 115          120          125
His Met Arg Pro Arg Arg Pro His Gln Ile Ala Asp Leu Phe Arg Pro
 130          135          140
Lys Asp Gln Ile Ala Tyr Ser Asp Thr Ser Pro Phe Leu Ile Leu Ser
 145          150          155          160
Glu Ala Ser Leu Ala Asp Leu Asn Ser Arg Leu Glu Lys Lys Val Lys
 165          170          175
Ala Thr Asn Phe Arg Pro Asn Ile Val Ile Ser Gly Cys Asp Val Tyr
 180          185          190
Ala Glu Asp Ser Trp Asp Glu Leu Leu Ile Gly Asp Val Glu Leu Lys
 195          200          205
Arg Val Met Ala Cys Ser Arg Cys Ile Leu Thr Thr Val Asp Pro Asp
 210          215          220
Thr Gly Val Met Ser Arg Lys Glu Pro Leu Glu Thr Leu Lys Ser Tyr
 225          230          235          240
Arg Gln Cys Asp Pro Ser Glu Arg Lys Leu Tyr Gly Lys Ser Pro Leu
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<210> 3807
 <211> 372
 <212> DNA
 <213> Homo sapiens

<400> 3807

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<210> 3808

<211> 85

<212> PRT

<213> Homo sapiens

<400> 3808

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		20						25				30			
Leu	Ala	Arg	Ser	Ala	Arg	Phe	Arg	Gln	Gly	Gly	Arg	Phe	Pro	Val	Leu
	35					40					45				
Ser	Tyr	His	Pro	Ala	Pro	Ser	Gly	Arg	Gly	Ser	Ala	Pro	Ser	Pro	Arg
	50					55				60					
Ser	Ala	Pro	Gly	Trp	Leu	Arg	Pro	Phe	Trp	Ala	Phe	Ser	Phe	Trp	Pro
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<210> 3809

<211> 1221

<212> DNA

<213> Homo sapiens

<400> 3809

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<210> 3810

<211> 97

<212> PRT

<213> Homo sapiens

<400> 3810

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Ser	Trp	Arg	Ala	Ser	Ser	Asn	Cys	Ser	Arg	Ala	Glu	Pro	Ile	Lys	Glu
		20					25					30			
Phe	Ser	Arg	Lys	Val	Gly	Arg	Pro	Pro	Thr	Pro	Ser	Arg	Arg	Val	Tyr
		35				40					45				
Arg	Gly	Thr	Arg	Thr	Arg	Pro	Ser	Thr	Ser	Ser	Pro	Trp	Ser	Leu	Ala
	50				55						60				
Arg	Val	Ala	Pro	Ala	Ser	Thr	Ala	Asn	Ser	Ser	Ser	Ser	Ser	Asp	Ala
65				70				75						80	
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Arg

<210> 3811

<211> 296

<212> DNA

<213> Homo sapiens

<400> 3811

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<210> 3812

<211> 94

<212> PRT

<213> Homo sapiens

<400> 3812

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<211> 1419

<212> DNA

<213> Homo sapiens

<400> 3813

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<211> 294

<212> PRT

<213> Homo sapiens

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Tyr	Ile	Tyr	His	Cys	Asn	Ala	Gln	Asn	Pro	Ser	Gly	Glu	Thr	Ala	Phe				
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			260					265					270						
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<211> 3669

<212> DNA

<213> Homo sapiens

<400> 3815

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<211> 707

<212> PRT

<213> Homo sapiens

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			20					25					30		
Asp	Ile	Ile	Cys	Cys	Val	Phe	Leu	Leu	Leu	Ala	Ile	Val	Gly	Tyr	Val
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Val Glu Lys Cys Pro Asp Arg Tyr Leu Thr Tyr Leu Asn Ala Arg Ser		110
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Ser Arg Asp Phe Glu Tyr Tyr Lys Gln Phe Cys Val Pro Gly Phe Lys		125
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Asn Asn Lys Gly Val Ala Glu Val Leu Arg Asp Gly Asp Cys Pro Ala		140
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His Ala Tyr Lys Gly Val Leu Met Val Gly Asn Glu Thr Thr Tyr Glu		175
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Lys Lys Ala Asn Gly Val Leu Glu Ala Arg Gln Leu Ala Met Arg Ile		205
	210	215
Phe Glu Asp Tyr Thr Val Ser Trp Tyr Trp Ile Ile Gly Leu Val		220
225	230	235
Ile Ala Met Ala Met Ser Leu Leu Phe Ile Ile Leu Leu Arg Phe Leu		240
	245	250
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Phe Arg Val Tyr Leu His Leu Arg Gln Thr Trp Leu Ala Phe Met Ile		300
305	310	315
Ile Leu Ser Ile Leu Glu Val Ile Ile Ile Leu Leu Leu Ile Phe Leu		320
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	340	345
Ala Val Gly Tyr Val Met Cys Ser Leu Leu Tyr Pro Leu Val Thr Phe		350
	355	360
Phe Leu Cys Cys Leu Cys Ile Ala Tyr Trp Ala Ser Thr Ala Val Phe		365
	370	375
Leu Ser Thr Ser Asn Glu Ala Val Tyr Lys Ile Phe Asp Asp Ser Pro		380
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	405	410
Ser Asn Glu Ser Arg Gln Cys Pro Asn Ala Arg Cys Gln Phe Ala Phe		415
	420	425
Tyr Gly Gly Glu Ser Gly Tyr His Arg Ala Leu Leu Gly Leu Gln Ile		430
	435	440
Phe Asn Ala Phe Met Phe Phe Trp Leu Ala Asn Phe Val Leu Ala Leu		445
	450	455
Gly Gln Val Thr Leu Ala Gly Ala Phe Ala Ser Tyr Tyr Trp Ala Leu		460
465	470	475
Arg Lys Pro Asp Asp Leu Pro Ala Phe Pro Leu Phe Ser Ala Phe Gly		480

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<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

<400> 3820

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Tyr Glu Trp Ala Pro Pro Val Gln Asn Gln Ala Leu Ala Arg Gln Tyr		
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Gln Asn Trp His Leu Lys His Phe Cys Cys Phe Asp Cys Asp Ser Ile		
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<210> 3821

<211> 5212

<212> DNA

<213> Homo sapiens

<400> 3821

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<212> PRT

<213> Homo sapiens

<400> 3822

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			20					25					30		
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Lys Phe Asn Asp Gly Leu Ser Leu Gln Glu Ser Cys Arg Leu Ile Glu
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Ala Leu Ser Ser Cys Gln Leu Pro Phe Gln Cys Ala His Gly Arg Pro
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Ser Met Leu Pro Leu Ala Asp Ile Asp His Leu Glu Gln Glu Lys Gln
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<212> DNA

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

<400> 3824

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<212> DNA

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<400> 3825

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<213> Homo sapiens

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<210> 3830

<211> 444

<212> PRT

<213> Homo sapiens

<400> 3830

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 Val Glu Ser Val Tyr Thr Thr Phe Arg Asp Arg Glu Ile Met Phe His

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Val Ser Thr Lys Leu Pro Phe Thr Asp Gly Asp Ala Gln Gln Leu Gln		
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Arg Lys Arg His Ile Gly Asn Asp Ile Val Ala Ile Ile Phe Gln Glu		
65	70	75
Glu Asn Thr Pro Phe Val Pro Asp Met Ile Ala Ser Asn Phe Leu His		
85	90	95
Ala Tyr Ile Val Val Gln Val Glu Thr Pro Gly Thr Glu Thr Pro Ser		
100	105	110
Tyr Lys Val Ser Val Thr Ala Arg Glu Asp Val Pro Thr Phe Gly Pro		
115	120	125
Pro Leu Pro Ser Pro Pro Val Phe Gln Lys Gly Pro Glu Phe Arg Glu		
130	135	140
Phe Leu Leu Thr Lys Leu Thr Asn Ala Glu Asn Ala Cys Cys Lys Ser		
145	150	155
Asp Lys Phe Ala Lys Leu Glu Asp Arg Thr Arg Ala Ala Leu Leu Asp		
165	170	175
Asn Leu His Asp Glu Leu His Ala His Thr Gln Ala Met Leu Gly Leu		
180	185	190
Gly Pro Glu Glu Asp Lys Phe Glu Asn Gly Gly His Gly Gly Phe Leu		
195	200	205
Glu Ser Phe Lys Arg Ala Ile Arg Val Arg Ser His Ser Met Glu Thr		
210	215	220
Met Val Gly Gly Gln Lys Lys Ser His Ser Gly Gly Ile Pro Gly Ser		
225	230	235
Leu Ser Gly Gly Ile Ser His Asn Ser Met Glu Val Thr Lys Thr Thr		
245	250	255
Phe Ser Pro Pro Val Val Ala Ala Thr Val Lys Asn Gln Ser Arg Ser		
260	265	270
Pro Ile Lys Arg Arg Ser Gly Leu Phe Pro Arg Leu His Thr Gly Ser		
275	280	285
Glu Gly Gln Gly Asp Ser Arg Ala Arg Cys Asp Ser Thr Ser Ser Thr		
290	295	300
Pro Lys Thr Pro Asp Gly Gly His Ser Ser Gln Glu Ile Lys Ser Glu		
305	310	315
Thr Ser Ser Asn Pro Ser Ser Pro Glu Ile Cys Pro Asn Lys Glu Lys		
325	330	335
Pro Phe Met Lys Leu Lys Glu Asn Gly Arg Ala Ile Ser Arg Ser Ser		
340	345	350
Ser Ser Thr Ser Ser Val Ser Ser Thr Ala Gly Glu Gly Glu Ala Met		
355	360	365
Glu Glu Gly Asp Ser Gly Gly Ser Gln Pro Ser Thr Thr Ser Pro Phe		
370	375	380
Lys Gln Glu Val Phe Val Tyr Ser Pro Ser Pro Ser Ser Glu Ser Pro		
385	390	395
Ser Leu Gly Ala Ala Ala Thr Pro Ile Ile Met Ser Arg Ser Pro Thr		
405	410	415
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<210> 3831

<211> 726

<212> DNA

<213> Homo sapiens

<400> 3831

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<210> 3832

<211> 107

<212> PRT

<213> Homo sapiens

<400> 3832

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20          25          30
Leu Ser Ser Ala Leu Ala Cys Tyr Gly Leu Ser Phe Leu Gln Leu His
35          40          45
Ser Thr Asn Ser His Ile Asp Arg Ile Asn Phe Ser Val Lys Met Val
50          55          60
Ser Ser Ile Leu Gln Ile Pro Lys Leu Ser Tyr Leu Gly Leu Gly Asp
65          70          75          80
Ile Lys Asn Met Glu Gln Lys Tyr Cys Asn Leu Cys Ile Gln Leu Phe
85          90          95
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<210> 3833

<211> 1764

<212> DNA

<213> Homo sapiens

<400> 3833

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<210> 3834

<211> 361

<212> PRT

<213> Homo sapiens

<400> 3834

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			20				25						30		
Val	Ser	Val	Cys	Asp	His	Cys	Lys	Gly	Lys	Met	Gln	Leu	Val	Ala	Asp
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Leu	Leu	Leu	Leu	Ser	Ser	Glu	Ala	Arg	Pro	Val	Leu	Phe	Glu	Gly	Pro
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Ala	Ser	Ser	Gly	Ala	Gly	Ala	Glu	Ser	Phe	Glu	Gln	Gly	Arg	Asp	Thr
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Ile	Ile	Ala	Arg	Thr	Lys	Gly	Leu	Ser	Ile	Leu	Thr	His	Asp	Val	Gln
				85					90					95	
Ser	Gln	Leu	Asn	Met	Gly	Arg	Phe	Gly	Glu	Ala	Gly	Asp	Ser	Leu	Val
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Glu	Leu	Gly	Asp	Leu	Val	Val	Ser	Leu	Thr	Glu	Cys	Ser	Ala	His	Ala
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Ala	Tyr	Leu	Ala	Ala	Val	Ala	Thr	Pro	Gly	Ala	Gln	Pro	Ala	Gln	Pro
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Gly	Leu	Val	Asp	Arg	Tyr	Arg	Val	Thr	Arg	Cys	Arg	His	Glu	Val	Glu
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Gln	Leu	Leu	Leu	Glu	Val	Ser	Gln	Gly	Leu	Ser	Arg	Asn	Leu	Lys	Phe
		180						185					190		
Leu	Thr	Asp	Ala	Cys	Ala	Leu	Ala	Ser	Asp	Lys	Ser	Arg	Asp	Arg	Phe
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Ser	Arg	Glu	Gln	Phe	Lys	Leu	Gly	Val	Lys	Cys	Met	Ser	Thr	Ser	Ala
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			245						250					255	
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		260						265					270		
Ala	Ala	Ala	Val	Ser	Ala	Glu	Gly	Lys	Ala	Val	Gln	Thr	Ala	Ile	Leu
		275					280						285		
Gly	Gly	Ala	Met	Ser	Val	Val	Ser	Ala	Cys	Val	Leu	Leu	Thr	Gln	Cys

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Leu Arg Asp Leu Ala Gln His Pro Asp Gly Gly Ala Lys Met Ser Asp				
305		310		315
His Arg Glu Arg Leu Arg Asn Ser Ala Cys Ala Val Ser Glu Gly Cys				320
	325		330	335
Thr Leu Leu Ser Gln Ala Leu Arg Glu Arg Ser Ser Pro Arg Thr Leu				
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Pro Pro Val Asn Ser Asn Ser Val Asn				
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<210> 3835

<211> 2366

<212> DNA

<213> Homo sapiens

<400> 3835

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<210> 3836

<211> 479

<212> PRT

<213> Homo sapiens

<400> 3836

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Phe Phe Leu Phe Val Ser Leu Ile Gln Phe Leu Ile Ile Leu Gly Leu		
65	70	75
Val Leu Phe Met Val Tyr Gly Asn Val His Val Ser Thr Glu Ser Asn		
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Leu Gln Ala Thr Glu Arg Arg Ala Glu Gly Leu Tyr Ser Gln Leu Leu		
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Gly Leu Thr Ala Ser Gln Ser Asn Leu Thr Lys Glu Leu Asn Phe Thr		
115	120	125
Thr Arg Ala Lys Asp Ala Ile Met Gln Met Trp Leu Asn Ala Arg Arg		
130	135	140
Asp Leu Asp Arg Ile Asn Ala Ser Phe Arg Gln Cys Gln Gly Asp Arg		
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Val Ile Tyr Thr Asn Asn Gln Arg Tyr Met Ala Ala Ile Ile Leu Ser		
165	170	175
Glu Lys Gln Cys Arg Asp Gln Phe Lys Asp Met Asn Lys Ser Cys Asp		
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Ala Leu Leu Phe Met Leu Asn Gln Lys Val Lys Thr Leu Glu Val Glu		
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Ile Ala Lys Glu Lys Thr Ile Cys Thr Lys Asp Lys Glu Ser Val Leu		
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Lys Val Gln Ala Leu Cys Leu Pro Leu Asp Lys Asp Lys Phe Glu Met		
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420	425	430
Pro Met Met Pro Val Ser Arg Pro Met Gly Pro Val Pro Asn Pro Gln		
435	440	445
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<211> 2084

<212> DNA

<213> Homo sapiens

<400> 3837

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1380

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 1920
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 1980
 gagcactctg gggcagcctg gctcaggtt attgatttcc gtctgtttac cctatccatt
 2040
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 2084

<210> 3838

<211> 468

<212> PRT

<213> Homo sapiens

<400> 3838

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Ile	Lys	Ser	Ile	Leu	Pro	Gly	Arg	Ser	Cys	Asp	Leu	Leu	Gln	Asp	Thr
			20					25					30		
Ser	His	Leu	Pro	Pro	Glu	His	Ser	Asp	Val	Val	Ile	Val	Gly	Gly	Gly
	35					40						45			
Val	Leu	Gly	Leu	Ser	Val	Ala	Tyr	Trp	Leu	Lys	Lys	Leu	Glu	Ser	Arg
	50				55					60					
Arg	Gly	Ala	Ile	Arg	Val	Leu	Val	Val	Glu	Arg	Asp	His	Thr	Tyr	Ser
65				70					75					80	
Gln	Ala	Ser	Thr	Gly	Leu	Ser	Val	Gly	Gly	Ile	Cys	Gln	Gln	Phe	Ser
			85					90					95		
Leu	Pro	Glu	Asn	Ile	Gln	Leu	Ser	Leu	Phe	Ser	Ala	Ser	Phe	Leu	Arg
	100					105						110			
Asn	Ile	Asn	Glu	Tyr	Leu	Ala	Val	Val	Asp	Ala	Pro	Pro	Leu	Asp	Leu
	115					120					125				
Arg	Phe	Asn	Pro	Ser	Gly	Tyr	Leu	Leu	Leu	Ala	Ser	Glu	Lys	Asp	Ala
	130				135					140					
Ala	Ala	Met	Glu	Ser	Asn	Val	Lys	Val	Gln	Arg	Gln	Glu	Gly	Ala	Lys
145				150					155					160	
Val	Ser	Leu	Met	Ser	Pro	Asp	Gln	Leu	Arg	Asn	Lys	Phe	Pro	Trp	Ile
			165					170					175		
Asn	Thr	Glu	Gly	Val	Ala	Leu	Ala	Ser	Tyr	Gly	Met	Glu	Asp	Glu	Gly

180 185 190
 Trp Phe Asp Pro Trp Cys Leu Leu Gln Gly Leu Arg Arg Lys Val Gln
 195 200 205
 Ser Leu Gly Val Leu Phe Cys Gln Gly Glu Val Thr Arg Phe Val Ser
 210 215 220
 Ser Ser Gln Arg Met Leu Thr Thr Asp Asp Lys Ala Val Val Leu Lys
 225 230 235 240
 Arg Ile His Glu Val His Val Lys Met Asp Arg Ser Leu Glu Tyr Gln
 245 250 255
 Pro Val Glu Cys Ala Ile Val Ile Asn Ala Ala Gly Ala Trp Ser Ala
 260 265 270
 Gln Ile Ala Ala Leu Ala Gly Val Gly Glu Gly Pro Pro Gly Thr Leu
 275 280 285
 Gln Gly Thr Lys Leu Pro Val Glu Pro Arg Lys Arg Tyr Val Tyr Val
 290 295 300
 Trp His Cys Pro Gln Gly Pro Gly Leu Glu Thr Pro Leu Val Ala Asp
 305 310 315 320
 Thr Ser Gly Ala Tyr Phe Arg Arg Glu Gly Leu Gly Ser Asn Tyr Leu
 325 330 335
 Gly Gly Arg Ser Pro Thr Glu Gln Glu Glu Pro Asp Pro Ala Asn Leu
 340 345 350
 Glu Val Asp His Asp Phe Phe Gln Asp Lys Val Trp Pro His Leu Ala
 355 360 365
 Leu Arg Val Pro Ala Phe Glu Thr Leu Lys Cys Phe Val His Pro Gln
 370 375 380
 Val Gln Ser Ala Trp Ala Gly Tyr Tyr Asp Tyr Asn Thr Phe Asp Gln
 385 390 395 400
 Asn Gly Val Val Gly Pro His Pro Leu Val Val Asn Met Tyr Phe Ala
 405 410 415
 Thr Gly Phe Ser Gly His Gly Leu Gln Gln Ala Pro Gly Ile Gly Arg
 420 425 430
 Ala Val Ala Glu Met Val Leu Lys Gly Arg Phe Gln Thr Ile Asp Leu
 435 440 445
 Ser Pro Phe Leu Phe Thr Arg Phe Tyr Leu Gly Glu Lys Ile Gln Glu
 450 455 460
 Asn Asn Ile Ile
 465

<210> 3839

<211> 758

<212> DNA

<213> Homo sapiens

<400> 3839

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 120
 gtccttttca cttatttcca gggagacatt gggtcagtag tggatgaaca cttctcaaga
 180
 gctttgggcc aagccatcac cctccatcca gaatctgcc tttcaaaaag caagatgggg
 240
 ctaaccccc tatggcgaga cagctcagct ctctcaagcc agcggaatag tttcccaact
 300

tccttttga ccagctctta ccagccccc cctgcacctt gtttggggg agttcatcct
 360
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 420
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 480
 tatcctttga catctcaggt gagcccatcc tacagccata tgcacgacgt gtacatgcgg
 540
 caccaccacc ctcatgccc catgcaccac cgccaccgcc accatcatca ccataccacc
 600
 cctcctgctg gctctgccct ggatccatcc tatgggcctc tgctgatgcc ttcagtgcct
 660
 gcggccagga ttctgctcc ccagtgtgac atcacaaga cagaaccaac tacagtcacc
 720
 tctgtacct cagcatgggc tggagccttt catggaac
 758

<210> 3840

<211> 252

<212> PRT

<213> Homo sapiens

<400> 3840

Xaa	Arg	Val	Gln	Asp	Ser	Leu	Glu	Val	Thr	Leu	Pro	Ser	Lys	Gln	Glu
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Glu	Glu	Asp	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Lys	Asp	Gln	Pro	Ala	Glu
			20					25					30		
Met	Glu	Tyr	Leu	Asn	Ser	Arg	Cys	Val	Leu	Phe	Thr	Tyr	Phe	Gln	Gly
		35					40					45			
Asp	Ile	Gly	Ser	Val	Val	Asp	Glu	His	Phe	Ser	Arg	Ala	Leu	Gly	Gln
	50					55					60				
Ala	Ile	Thr	Leu	His	Pro	Glu	Ser	Ala	Ile	Ser	Lys	Ser	Lys	Met	Gly
65					70					75				80	
Leu	Thr	Pro	Leu	Trp	Arg	Asp	Ser	Ser	Ala	Leu	Ser	Ser	Gln	Arg	Asn
				85					90					95	
Ser	Phe	Pro	Thr	Ser	Phe	Trp	Thr	Ser	Ser	Tyr	Gln	Pro	Pro	Pro	Ala
			100					105					110		
Pro	Cys	Leu	Gly	Gly	Val	His	Pro	Asp	Phe	Gln	Val	Thr	Gly	Pro	Pro
		115					120					125			
Gly	Thr	Phe	Ser	Ala	Ala	Asp	Pro	Ser	Pro	Trp	Pro	Gly	His	Asn	Leu
	130					135					140				
His	Gln	Thr	Gly	Pro	Ala	Pro	Pro	Pro	Ala	Val	Ser	Glu	Ser	Trp	Pro
145					150					155				160	
Tyr	Pro	Leu	Thr	Ser	Gln	Val	Ser	Pro	Ser	Tyr	Ser	His	Met	His	Asp
				165					170				175		
Val	Tyr	Met	Arg	His	His	His	Pro	His	Ala	His	Met	His	His	Arg	His
			180					185				190			
Arg	His	His	His	His	His	His	His	Pro	Pro	Ala	Gly	Ser	Ala	Leu	Asp
		195					200					205			
Pro	Ser	Tyr	Gly	Pro	Leu	Leu	Met	Pro	Ser	Val	His	Ala	Ala	Arg	Ile
		210				215					220				
Pro	Ala	Pro	Gln	Cys	Asp	Ile	Thr	Lys	Thr	Glu	Pro	Thr	Thr	Val	Thr
225					230					235				240	
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245

250

<210> 3841

<211> 367

<212> DNA

<213> Homo sapiens

<400> 3841

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120
atagtgtgct ttctcttcct cattgaacat ccgaacgacg tcaggtgctc ctccaccctg
180
gtgacgcact caaaaggcta tgagaatggg acaaacaggt tgagcctccc gaagccaatc
240
ttgaagagcg aaaagaacaa gcctctggac ccagagatgc agtgctgct gctctcagat
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ccggccg
367

<210> 3842

<211> 122

<212> PRT

<213> Homo sapiens

<400> 3842

Leu	Gly	Thr	Pro	His	Thr	Ser	Val	Gly	Asn	Ile	Leu	Gly	Ser	Leu	Ile
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Ala	Gly	Tyr	Trp	Val	Ser	Thr	Cys	Trp	Gly	Leu	Ser	Phe	Val	Val	Pro
			20					25					30		
Gly	Ala	Ile	Val	Ala	Ala	Met	Gly	Ile	Val	Cys	Phe	Leu	Phe	Leu	Ile
		35				40					45				
Glu	His	Pro	Asn	Asp	Val	Arg	Cys	Ser	Ser	Thr	Leu	Val	Thr	His	Ser
	50				55					60					
Lys	Gly	Tyr	Glu	Asn	Gly	Thr	Asn	Arg	Leu	Ser	Leu	Pro	Lys	Pro	Ile
65				70					75					80	
Leu	Lys	Ser	Glu	Lys	Asn	Lys	Pro	Leu	Asp	Pro	Glu	Met	Gln	Cys	Leu
			85					90					95		
Leu	Leu	Ser	Asp	Gly	Lys	Gly	Ser	Ile	His	Pro	Asn	His	Val	Val	Ile
			100					105					110		
Leu	Pro	Gly	Asp	Gly	Gly	Ser	Gly	Pro	Ala						
			115				120								

<210> 3843

<211> 712

<212> DNA

<213> Homo sapiens

<400> 3843

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 120
 tcccgcaagc gctcgaggag tcgcagccgg tcccggggac gggggtcgga aaagagaaag
 180
 aagaagagca ggaaagacac ctcgaggaac tgctcggcct ccacatccca aggtcgcaag
 240
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 300
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 360
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 420
 aagtacaagg acaagaggag gaagaagaag aagaagagga agaagctgaa gaagaagggc
 480
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 600
 acgacacaga gagatcaaca agcaagccac ccgaggggac tgctggcct tccagatgcg
 660
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 712

<210> 3844

<211> 143

<212> PRT

<213> Homo sapiens

<400> 3844

Met	Ala	His	Val	Gly	Ser	Arg	Lys	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Ser
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Arg	Gly	Arg	Gly	Ser	Glu	Lys	Arg	Lys	Lys	Ser	Arg	Lys	Asp	Thr	
			20				25				30				
Ser	Arg	Asn	Cys	Ser	Ala	Ser	Thr	Ser	Gln	Gly	Arg	Lys	Ala	Ser	Thr
		35				40				45					
Ala	Pro	Gly	Ala	Glu	Ala	Ser	Pro	Ser	Pro	Cys	Ile	Thr	Glu	Arg	Ser
	50				55				60						
Lys	Gln	Lys	Ala	Arg	Arg	Thr	Arg	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser
65			70					75			80				
Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser
		85					90				95				
Ser	Ser	Asp	Gly	Arg	Lys	Lys	Arg	Gly	Lys	Tyr	Lys	Asp	Lys	Arg	Arg
		100					105				110				
Lys	Lys	Lys	Lys	Lys	Arg	Lys	Lys	Leu	Lys	Lys	Lys	Gly	Lys	Glu	Lys
		115				120					125				
Ala	Glu	Ala	Gln	Gln	Ala	Glu	His	His	Pro	Gln	Gly	Gly	Gly	Pro	
	130					135					140				

<210> 3845

<211> 2302

<212> DNA

<213> Homo sapiens

<400> 3845

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120
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180
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240
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300
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420
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480
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600
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660
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720
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780
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840
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960
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1020
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1560
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1620

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 1740
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 1800
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 1860
 ttaatatattt cttttgtaaa cttaatgcc acaagggtcta agttatgttt acaacatgaa
 1920
 gaaaacctca aagttcttaa tttttaaaat gcctagaaga caatatttag tcttggatta
 1980
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 2040
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 2100
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 2160
 tgcaaacaaa accaggtaag tatggaacaa tgtgtaagt aggttatcac actttgatgt
 2220
 aaaaatttct attttgtgta tttttaaaat aaatgcaaac actaaactaa aaaaaaaaaa
 2280
 aaaaaaaaaa aaaaaaaaaa aa
 2302

<210> 3846

<211> 197

<212> PRT

<213> Homo sapiens

<400> 3846

Ser	Cys	Lys	Gly	Asn	His	Ala	Lys	Glu	Ala	Gly	Cys	Thr	Ile	Arg	Ala
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Cys	Arg	Ala	Gly	Leu	Trp	Gly	Pro	Ala	Asp	Pro	Ser	Ser	Gln	Asn	Gln
		20					25						30		
Gly	Pro	Ala	Glu	Pro	Arg	Val	Ala	Gly	Ala	Gly	Ala	Ala	Ala	Ala	Glu
	35					40					45				
Gly	Ala	Ala	Ala	Gly	Ala	Cys	Gly	Pro	Ala	Arg	Cys	Ala	Asp	Gln	Gly
	50				55					60					
Gly	Ala	Arg	Glu	Arg	Gly	Gly	Arg	Gly	Gly	Arg	Gly	Ala	Gly	Gly	Gly
65				70				75						80	
Gly	Gly	Ala	His	Gly	His	Phe	Pro	Gln	Arg	Pro	Pro	Gln	Gln	Ala	Gly
			85					90						95	
Gln	Arg	Ala	Ala	Ser	Arg	Ala	Gly	Cys	Gly	His	Arg	Gln	Leu	Gln	Arg
		100					105						110		
Ala	Pro	Ala	Pro	Gly	Leu	Arg	Gln	His	Pro	Cys	Gly	Ser	Gly	Thr	Glu
	115					120						125			
Gly	Leu	Arg	Gly	Gly	His	Leu	Ser	Glu	Thr	Val	Cys	Ala	His	Ala	Glu
	130				135					140					
Arg	Thr	Gln	Ala	Pro	Leu	Gln	Ser	Ala	Leu	Gly	Gln	Pro	Ala	Pro	Arg
145				150					155					160	
Pro	His	Thr	Leu	Gln	Arg	His	Leu	Gly	Pro	His	Ala	Thr	Gly	His	Gly
			165				170						175		
Ala	Gly	Arg	Arg	Leu	Gln	Ala	Asp	Thr	Gly	Ala	Phe	Ser	Pro	Pro	Asp